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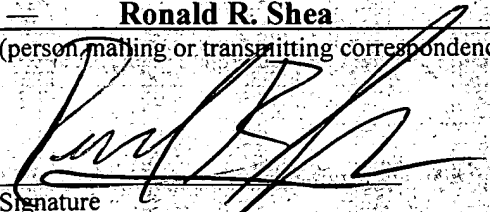
In Re Application of:	)	Examiner: Le, Tan
	)	
Shelly Lenna Bauerly	)	Group Art Unit: 3632
	)	
Application Serial No. 10/763,426	)	<b>Appeal Brief under 37 CFR 41.37</b>
	)	
Filed: January 23, 2004	)	Ronald R. Shea
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**APPEAL BRIEF UNDER 37 CFR 41.37**

Board of Patent Appeals and Interferences  
P.O. Box 1450  
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Sir:

The following Appeal Brief is submitted under 37 CFR 41.37 in relation to the Notice of Appeal posted on May 12, 2008 for U.S. Patent Application 10/763,426 to Bauerly.

<b>CERTIFICATE OF MAILING:</b>	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage for FIRST CLASS mail, in a sealed envelope addressed to Commissioner for Patents and Trademarks, P.O. Box 1450, Alexandria VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.	
<u>Ronald R. Shea</u> (person making or transmitting correspondence)	
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## REAL PARTY IN INTEREST

The real party in interest is the named inventor, Shelly Lenna Bauerly ("Bauerly").



## RELATED APPEALS AND INTERFERENCES

None.

## STATUS OF CLAIMS

Prosecution has encompassed claims 1-41. Claims 3, 33, 34 and 40 have been cancelled. Claims 5, 6, 7, 8, 9, 19, 20, 29, 30, 31, 32, 35, 36, 39 have been withdrawn pending the allowance of a generic base claim. Claims 21 and 26 have been objected to, but would be allowable if rewritten to include the limitations of their base claims and any intervening claims. Claims 1, 2, 4, 10, 11, 12, 13, 14, 15, 16, 17, 18, 22, 23, 24, 25, 27, 28, 37, 38 and 41 have been rejected. Claims 1, 2, 13, 14, 22, and 37 are being appealed.

## STATUS OF AMENDMENTS

No amendment have been filed since the Final Office Action of January 1, 2008.

## SUMMARY OF CLAIMED SUBJECT MATTER

All page and line numbers referenced herein are drawn from the application as originally submitted, which is presented as Exhibit 1.

*The following elements are recited in Independent Claim 1:*

### a purse hanger (20)

See Fig. 1. Also shown without call-out number in Figs. 2, 3, 4, 5, 16 and 19. See page 1, lines 29, 31; page 2, lines 1-2, 11; page 3, line 17; page 5, lines 17, 20, 25; page 6, line 12, 28-30; page 11, lines 3, 12, 24-27; page 12, lines 15, 16, 17, 21, 31; page 14, line 31; page 15, line 1.

### a rigid interface member (22)

The rigid interface member is the solid part of the purse hanger that rests above a table top. See Figs. 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16 and page 5, line 26; page 6, lines 6-19; page 7, lines 4-21. An alternative embodiment is shown in Fig. 18, the rigid interface member 25 includes a rigid frame 26 and legs 87 with protective cork or felt pads 28. A discussion directed specifically to the rigid interface member, functionality, and components thereof is found from page 7, line 4 through page 9, line 7, and detailed discussion is also found on page 10, lines 1-28 and page 12, lines 1-24. Additional references to the rigid interface member, or the operation thereof, are found on page 2, lines 11-15, 20-21; page 4, lines 17-21, lines 26-31; page 5, lines 5-6, 8-9, 17-18, 26; page 6, lines 1-4, 6-13, 18; page 9, line 22; page 11, line 26;; page 13; line 11; page 15, line 1.

### a planar interface area (23, 28)

See page 6, lines 6-13, page 7, lines 5-21, page 8, lines 6-7, page 9, lines 22-24, page 11 line 22 through page 12, line 24. Figures 2, 12, 13 and 18 reference the planar interface area by all out

number. The planar interface area 23 can be the area defined by a protective member such as cork, felt, etc. coating discussed on page 6, line 6. In an alternative embodiment depicted in Fig. 18, the planar interface region comprises the upper triangle (shown in phantom) touching the bottom of foot pads 28 and coextensive with the horizontal limits of the triangular column 69 defining the stable region beneath the rigid interface member.

a rigid arm (45) with a proximal segment (50) terminating at a proximal end, a distal segment terminating at a distal end (55), and a central extension disposed between a proximal segment and a distal segment

The rigid arm (45), its component parts, and its relationship to the rigid interface member are discussed in detail from page 9, line 4 through page 11, line 20, and page 5, line 30 through page 6, line 4. Additionally, the rigid arm, and features associated therewith, are described on page 2, lines 13-21; page 3, lines 1-6; page 4, lines 11-12, 20-21, 26-27; page 6, lines 1-4, 11-13; page 9, lines 4-7; page 7 line 13; page 11, lines 22-29; and page 12, lines 13-24, 28.

Within the Figures, the rigid arm (45) is depicted with reference number in Figs. 1-6, 14, 17 and 19, and is show in part without call out number in Figs. 7-8, 10-12, 15, 17 and 18. The rigid arm is discussed with specificity from page 9, line 9 through page 11, line 20. The rigid arm (45) is referenced by number in Figs. 1-6, 14, 17 and 19, and is show in part without call out number in Figs. 7-8, 10-12, 15, 17 and 18.

The "proximal segment" or "horizontal extension" (50) that couples to the neck of the rigid interface member is referenced by number in Figs. 2, 4, 5, 11,. It is show without call-out number in Figs. 1, 3, 10

The "central extension" of the rigid arm is depicted in Figs. 2, 5, 7, 8, 12, 14, 16 and 19 as the portion of the rigid arm extending from the proximal segment to the distal segment. In Fig. 19, the

central extension is depicted as a long progressively curved member extending from the “horizontal extension” (50) to the distal segment. In Figs. 2, 5, 7, 8, 12, 14, and 16, the “central extension” includes a “vertical extension” (51), and an angled member extending from the vertical extension (51) to the distal segment.

wherein the central extension curves into the distal segment which extends vertically downward from the central extension when the distal end is positioned vertically beneath the planar interface area

See Figs. 1, 2, 12, 13 and 19. See page 2, lines 13-15, page 6, 1-4, 11-13; page 11, lines 22-28, page 12, lines 9-11 and 21-24.

a flexible member (60)

See Figs. 1-6, 16, 17 and 19. A typographical error in Fig. 19 depicts this element as 63. The flexible member is properly referred to as element 60 throughout the rest of the disclosure. Page 12, line 26 through page 13, line 31 of the specification is directed specifically to the flexible member. Additionally, reference is made to the flexible member on page 2, line 16, page 3, lines 4, 18; line 4, page 8, 9; page 5, line 9, 12, 14; page 6, line 15, 17, 27, 28; page 11, line 12.

a purse engagement member (70)

This element refers to the loop of the purse holder that engages the purse strap in Figures 1-5, and 19. This element is shown without call-out number in Fig. 16. Within the disclosure the purse engagement member is also referred to as a “rigid loop” and a “purse engagement loop.” This element is discussed in detail on page 14, lines 1-28. Reference is also made to this element on page 6, lines 15-17, 29-30; page 13, line 30, page 13, line 1 and page 15, lines 1-2.

*The following elements are recited in Independent Claim 22*

*a horizontal surface* (21)

See Figs. 1, 2, 3. Also shown without call out number in Figs. 13, 14 and 19. Variouslly referred to as a "horizontal surface" and a "table," "tabletop," "table surface" and "bar" within the specification, see page 1, line 9, 13-20, 29-31; page 2, lines 8, 12-13; page 3, line 24; page 5, line 26; page 6, lines 9, 18, 19, 26; page 7, line 6, 13, 17; page 11, lines 4, 25; page 12, lines 2, 5; page 13, line 11, page 14, line 31.

*a purse hanger* (20)

See Fig. 1. Also shown without call-out number in Figs. 2, 3, 4, 5, 16 and 19. See page 1, lines 29, 31; page 2, lines 1-2, 11; page 3, line 17; page 5, lines 17, 20, 25; page 6, line 12, 28-30; page 11, lines 3, 12, 24-27; page 12, lines 15, 16, 17, 21, 31; page 14, line 31; page 15, line 1.

*a rigid interface member* (22)

The rigid interface member is the solid part of the purse hanger that rests above a table top. See Figs. 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16 and page 5, line 26; page 6, lines 6-19; page 7, lines 4-21. An alternative embodiment is shown in Fig. 18, the rigid interface member 25 includes a frame 26 and legs 87 with protective cork or felt pads 28. A discussion directed specifically to the rigid interface member, functionality, and components thereof is found from page 7, line 4 through page 9, line 7, and detailed discussion is also found on page 10, lines 1-28 and page 12, lines 1-24. Additional references to the rigid interface member, or the operation thereof, are found on page 2, lines 11-15, 20-21; page 4, lines 17-21, lines 26-31; page 5, lines 5-6, 8-9, 17-18, 26; page 6, lines 1-4, 6-13, 18; page 9, line 22; page 11, line 26;; page 13; line 11; page 15, line 1.

*a planar interface* (23, 28)

See page 6, lines 6-13, page 7, lines 5-21, page 8, lines 6-7, page 9, lines 22-24, page 11 line 22 through page 12, line 24. Figures 2, 12, 13 and 18 reference the planar interface area by all out number. The planar interface area 23 can be the area defined by a protective member such as cork, felt, etc. coating discussed on page 6, line 6. In an alternative embodiment depicted in Fig. 18, the planar interface region comprises the upper triangle (shown in phantom) touching the bottom of foot pads 28 and coextensive with the horizontal limits of the triangular column 69 defining the stable region beneath the rigid interface member.

a rigid arm (45) with a proximal segment (50) terminating at a proximal end, a distal segment terminating at a distal end (55), and a central extension extending from a the proximal segment through a first bend, and extending into the distal segment through a second bend, the central extension being oriented, at least in part, in a direction different from the proximal segment, and in a direction different from the distal segment, the proximal end being coupled to said rigid interface member (22)

The rigid arm (45) and its component parts are discussed in detail from page 9, lines 9-27, through page 11, line 20, and page 5, line 30 through page 6, line 4. Additionally, the rigid arm, and features associated therewith, are described on page 2, lines 13-21; page 3, lines 1-6; page 4, lines 11-12, 20-21, 26-27; page 6, lines 1-4, 11-13; page 9, lines 4-7; page 7 line 13; page 11, lines 22-29; and page 12, lines 13-24, 28. The rigid arm (45) is referenced by number in Figs. 1-6, 14, 17 and 19, and is show in part without call out number in Figs. 7-8, 10-12, 15, 17 and 18.

The "proximal segment" or "horizontal extension" (50) that couples to the neck of the rigid interface member is referenced in Figs. 2, 4, 5, 11. It is show without call-out number in Figs. 1, 3, 10.



The “central extension” of the rigid arm is depicted in Figs. 2, 5, 7, 8, 12, 14, 16 and 19 as the portion of the rigid arm extending from the proximal segment to the distal segment. In Fig. 19, the central extension is depicted as a long progressively curved member extending from the “horizontal extension” (50) to the distal segment. In Figs. 2, 5, 7, 8, 12, 14, and 16, the “central extension” includes a “vertical extension” (51), and an angled member extending from the vertical extension (51) to the distal segment.

wherein the rigid arm is configured to position the distal segment in a vertical orientation that is vertically aligned beneath the rigid interface member when the rigid interface member is disposed on the horizontal surface

See page 6, lines 11-13; page 9, lines 21-24, page 9, line 29 through page 10, line 28; page 11, lines 22-29, page 12, lines 13-24. See also Figs. 2 and 19 for illustration of alignment beneath the rigid interface member, and Figs. 10-16 for design features contributing to self orientation vertically beneath the rigid interface member.

a flexible member with first and second ends, said first end of said flexible member secured to said distal end of said rigid arm

See Figs. 1-6, 16, 17 and 19. A typographical error in Fig. 19 depicts this element as 63. The flexible member is properly referred to as element 60 throughout the rest of the disclosure. Page 12, line 26 through page 13, line 31 of the specification is directed specifically to the flexible member. Additionally, reference is made to the flexible member on page 2, line 16, page 3, lines 4, 18; line 4, page 8, 9; page 5, line 9, 12, 14; page 6, line 15, 17, 27, 28; page 11, line 12.

a purse engagement member (70) coupled with said second end of said flexible member

The purse engagement member 70 is the loop of the purse holder that engages the purse strap in Figures 1-5, and 19. It is also shown without call-out number 70 on Fig. 16. Within the disclosure the purse engagement member is also referred to as a "rigid loop" and a "purse engagement loop." This element is discussed in detail on page 14, lines 1-28. Reference is made to this element on page 6, lines 15-17, 29-30; page 13, line 30, page 13, line 1 and page 15, lines 1-2.

***The following elements are recited in Independent Claim 37:***

**a purse hanger (20)**

See Fig. 1. Also shown without call-out number in Figs. 2, 3, 4, 5, 16 and 19. See page 1, lines 29, 31; page 2, lines 1-2, 11; page 3, line 17; page 5, lines 17, 20, 25; page 6, line 12, 28-30; page 11, lines 3, 12, 24-27; page 12, lines 15, 16, 17, 21, 31; page 14, line 31; page 15, line 1.

**a rigid interface member (22)**

The rigid interface member is the solid part of the purse hanger that rests above a table top. See Figs. 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16 and page 5, line 26; page 6, lines 6-19; page 7, lines 4-21. Fig. 18 discloses an alternative embodiment of a rigid interface member 25 which includes a frame 26 and legs 87 with protective cork or felt pads 28. A discussion directed specifically to the rigid interface member, functionality, and components thereof is found from page 7, line 4 through page 9, line 7, and detailed discussion is also found on page 10, lines 1-28 and page 12, lines 1-24. Additional references to the rigid interface member, or the operation thereof, are found on page 2, lines 11-15, 20-21; page 4, lines 17-21, lines 26-31; page 5, lines 5-6, 8-9, 17-18, 26; page 6, lines 1-4, 6-13, 18; page 9, line 22; page 11, line 26;; page 13; line 11; page 15, line 1.

**a planar interface area (23, 28)**

See page 6, lines 6-13, page 7, lines 5-21, page 8, lines 6-7, page 9, lines 22-24, page 11 line 22 through page 12, line 24. Figures 2, 12, 13 and 18 reference the planar interface area by all out number. The planar interface area 23 can be the area defined by a protective member such as cork, felt, etc. coating discussed on page 6, line 6. In an alternative embodiment depicted in Fig. 18, the planar interface region comprises the upper triangle (shown in phantom) touching the bottom of foot pads 28 and coextensive with the horizontal limits of the triangular column 69 defining the stable region beneath the rigid interface member.

a bent rigid arm (45) with a proximal segment (50) terminating at a proximal end, and a distal segment terminating at a distal end (55), wherein the proximal segment is coupled to said interface member (22) in an orientation substantially parallel to the planar interface area.

The rigid arm (45) and its component parts are discussed in detail from page 9, lines 9-27, through page 11, line 20, and page 5, line 30 through page 6, line 4. Additionally, the rigid arm, and features associated therewith, are described on page 2, lines 13-21; page 3, lines 1-6; page 4, lines 11-12, 20-21, 26-27; page 6, lines 1-4, 11-13; page 9, lines 4-7; page 7 line 13; page 11, lines 22-29; and page 12, lines 13-24, 28. The rigid arm (45) is referenced by number in Figs. 1-6, 14, 17 and 19, and is show in part without call out number in Figs. 7-8, 10-12, 15, 17 and 18.

The "proximal segment" or "horizontal extension" (50) that couples to the neck of the rigid interface member is referenced by number in Figs. 2, 4, 5, 11. It is show without call-out number in Figs. 1, 3, 10.

The "central extension" of the rigid arm is depicted in Figs. 2, 5, 7, 8, 12, 14, 16 and 19 as the portion of the rigid arm extending from the proximal segment to the distal segment. In Fig. 19, the central extension is depicted as a long progressively curved member extending from the "horizontal

extension” (50) to the distal segment. In Figs. 2, 5, 7, 8, 12, 14, and 16, the “central extension” includes a “vertical extension” (51), and an angled member extending from the vertical extension (51) to the distal segment.

the rigid arm being configured such that the distal segment is aligned in a vertical orientation vertically beneath the planar interface area when the planar interface area is horizontal.

See page 6, lines 11-13; page 9, lines 21-24, page 9, line 29 through page 10, line 28; page 11, lines 22-29, page 12, lines 13-24. See also Figs. 2 and 19 for illustration of alignment beneath the rigid interface member, and Figs. 10-16 for design features contributing to self orientation vertically beneath the rigid interface member.

and wherein the distal end (55) comprises a securement member (61)

“Securement member” 61 is also called the “upper flexible member coupling” within the disclosure. See page 6, lines 15-16, page 9, lines 26-27, page 12, lines 27-28, page 13, lines 15-18. This element is illustrated with call out number 61 in Figs. 2, 5, 6, 16, 17 and 19.

a flexible member (60) with first and second ends, said first end of said flexible member secured to the securement member (61)

See Figs. 1-6, 16, 17 and 19. A typographical error in Fig. 19 depicts this element as 63. The flexible member is properly referred to as element 60 throughout the rest of the disclosure. Page 12, line 26 through page 13, line 31 of the specification is directed specifically to the flexible member. Additionally, reference is made to the flexible member on page 2, line 16, page 3, lines 4, 18; line 4, page 8, 9; page 5, line 9, 12, 14; page 6, line 15, 17, 27, 28; page 11, line 12.

a purse engagement member (70) coupled with said second end of said flexible member

The purse engagement member (70) refers to the loop of the purse holder that engages the purse strap in Figures 1-5, and 19. Also shown without call-out number 70 on Fig. 16. Within the disclosure the purse engagement member is also referred to as a "rigid loop" and a "purse engagement loop." This element is discussed in detail on page 14, lines 1-28. Reference is also made to this element on page 6, lines 15-17, 29-30; page 13, line 30, page 13, line 1 and page 15, lines 1-2.

***The following elements are recited in dependent claim 2:***

purse hanger (20)

See Fig. 1. Also shown without call-out number in Figs. 2, 3, 4, 5, 16 and 19. See page 1, lines 29, 31; page 2, lines 1-2, 11; page 3, line 17; page 5, lines 17, 20, 25; page 6, line 12, 28-30; page 11, lines 3, 12, 24-27; page 12, lines 15, 16, 17, 21, 31; page 14, line 31; page 15, line 1.

distal end of said rigid arm (45)

The rigid arm (45) is depicted and identified by call out number in Figs. 2, 3, 4, 14 and 16. An alternative embodiment of a rigid arm is disclosed and identified by call out number in Fig. 19. The rigid arm is further depicted without call out number in its entirety in Figs. 1, 11, 12, and 18. The rigid arm is specifically discussed in detail from page 9, line 4 through page 11, line 20, and is discussed in some detail on page 5, line 30 through page 6, line 4. Additionally, the rigid arm, and features associated therewith, are described on page 2, lines 13-21; page 3, lines 1-6; page 4, lines 11-12, 20-21, 26-27; page 6, lines 1-4, 11-13; page 9, lines 4-7; page 7 line 13; page 11, lines 22-29; and page 12, lines 13-24, 28.

The distal end of the rigid arm is identified by call out number in Figs. 2, 5, 6, 16 and 19.

The distal end of the rigid arm is discussed, inter alia, on page 2, lines 14-16; page 3, line 5; page 5, lines 30 through page 6, line 2, lines 11-15; page 9, lines 24-25; page 11, line 2.

a planar interface area (23, 28)

See page 6, lines 6-13, page 7, lines 5-21, page 8, lines 6-7, page 9, lines 22-24, page 11 line 22 through page 12, line 24. Figures in which this element is numbered include Figs. 2, 12, 13 and 18, the planar interface area 23 is the area defined by a protective member such as cork, felt, etc. coating discussed on page 6, line 6. In the alternative embodiment of Fig. 18, planar interface region is illustrated by the upper triangle (shown in phantom) touching the bottom of foot pads 28 and coextensive with the horizontal limits of the triangular column 69 defining the stable region beneath the rigid interface member.

geometric center of said planar interface area

Page 11, lines 4-6, page 12, lines 13-24, Figs. 1, 3 and 19.

*The following elements are recited in dependent claim 13*

wherein the first end of the flexible member (60)

See Figs. 1-6, 16, 17 and 19. A typographical error in Fig. 19 depicts this element as 63. The flexible member is properly referred to as element 60 throughout the rest of the disclosure. Page 12, line 26 through page 13, line 31 of the specification is directed specifically to the flexible member. Additionally, reference is made to the flexible member on page 2, line 16, page 3, lines 4, 18; line 4, page 8, 9; page 5, line 9, 12, 14; page 6, line 15, 17, 27, 28; page 11, line 12.

is coupled to the distal (55) end of the rigid arm (45)

The rigid arm (45) and its component parts are discussed in detail from page 9, lines 9-27, through page 11, line 20, and page 5, line 30 through page 6, line 4. Additionally, the rigid arm, and features associated therewith, are described on page 2, lines 13-21; page 3, lines 1-6; page 4, lines 11-12, 20-21, 26-27; page 6, lines 1-4, 11-13; page 9, lines 4-7; page 7 line 13; page 11, lines 22-29; and page 12, lines 13-24, 28. The rigid arm (45) is referenced by number in Figs. 1-6, 14, 17 and 19, and is shown in part without call out number in Figs. 7-8, 10-12, 15, 17 and 18. The distal end (55) of the rigid arm is designated by call out numbers in Figs. 2, 5, 6, 17 and 19.

by a swivel joint (61)

See Figs. 2, 5, 6, 16, 17 and 19. For specific teaching within the specification, see page 13, lines 13-18 and 26-30.

*The following elements are recited in dependent claim 14*

wherein the second end of the flexible member (60)

See Figs. 1-6, 16, 17 and 19. A typographical error in Fig. 19 depicts this element as 63. The flexible member is properly referred to as element 60 throughout the rest of the disclosure. Page 12, line 26 through page 13, line 31 of the specification is directed specifically to the flexible member. Additionally, reference is made to the flexible member on page 2, line 16, page 3, lines 4, 18; line 4, page 8, 9; page 5, line 9, 12, 14; page 6, line 15, 17, 27, 28; page 11, line 12.

is coupled to the purse engagement member (70)

The purse engagement member (70) refers to the loop of the purse holder that engages the purse strap in Figures 1-5, and 19. Also shown without call-out number 70 on Fig. 16. Within the disclosure the purse engagement member is also referred to as a "rigid loop" and a "purse engagement loop." This element is discussed in detail on page 14, lines 1-28. Reference is also made to this element on page 6, lines 15-17, 29-30; page 13, line 30, page 13, line 1 and page 15, lines 1-2.

by a swivel joint (62)

See Figures 2, 5, 16, 17 and 19. For specific teaching within the specification, see page 13, lines 13-18 and 26-30.



## GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-2, 13-14, 22 and 37 are unpatentable under 35 U.S.C. § 103 over G.B. Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

## ARGUMENTS

Rejections under 35 U.S.C. § 103(a) over GB Patent No. 2,253,998 to Lurie in view of JP 10-113275 to Omura.

### REVIEW OF PRIOR ART CITED IN REJECTION

**GB 2,253,998 to Lurie**, submitted herewith as Exhibit 4, is directed to a purse hanger. Figures 1, 2 and 6 of Lurie disclose a purse hanger including a rigid interface member ("housing" 12) resting on a table, and a rigid arm ("elongated shaft" 13) extending from the housing outward parallel to the counter or table top, and then bending downward to form a "support arm 14" (Lurie, page 6). The Lurie purse hanger functions by a "zero moment" design in which the center of gravity of a purse is aligned beneath the rigid interface member. To prevent the purse from sliding off the tip, the *"Support arm 14 is deflected **upwardly** into a hook 15 upon which handbag 11 is hung"* (Lurie, page 6).

**Japanese Application 10-113275 JP** to Omura, submitted herewith as Exhibit 5, is directed to a purse hanger including a rigid arm ("iron bar," element 3) having a proximal end coupled with a rigid interface member (the "support backing" 1) by means of a "pivot" 5 including a "bearing, ball shaft" 2, and a distal end coupled with the flexible member ("connection tool" 6) by upper flexible member coupling ("connection link" 7). The proximal end of the flexible member coupled with the distal end of the rigid arm. The distal end of the flexible member is coupled to a rigid loop ("ring loop" 8) which is configured to detachable attach to a purse strap. The rigid arm of Omura is straight, exhibiting no curvature. A "stopper" 4 is formed on the proximal end of the rigid arm adjacent the "pivot" 5. The stopper is positioned to engage the bottom surface of the rigid interface member 1 during a pivot process, thereby limiting the pivot range of the rigid arm relative to the

rigid interface member (hereinafter the "pivot range") to 90 degrees. A verified translation of Omura is presented in Exhibit 6.

According to the laws of physics, when the rigid interface member of Omura rests on a horizontal surface, gravity will cause the rigid arm to orient itself in a vertical orientation. The rigid arm extends downward adjacent the edge of a table top or equivalent surface member. The short distance from the edge of the table (Omura, Fig. 4) to the pivot forms a destabilizing moment arm which, when operated upon by the downward force of the purse and the weight of purse hanger components overhanging the table edge, exerts a counter-clockwise moment (relative to Fig. 4) functioning to destabilize the purse hanger from the table top (hereinafter "destabilizing moment.")

Because the rigid arm of Omura is straight, the tensile axis of force extending through the rigid arm oriented vertically from the link 7 to the pivot 5. Accordingly, the Omura embodiment does not stabilize a purse by positioning the center of gravity of a purse beneath a table top. Rather, any functionality Omura may enjoy is limited to the extent to which the rigid interface member disposed above the table top is heavy enough to exert a clockwise moment (according to the orientation of Fig. 4—hereinafter, more generally, a "stabilizing moment,") greater than the destabilizing moment.

Omura was filed in 1998, roughly six years subsequent to the September 1992 filing date of Lurie, and had the benefit of the Lurie disclosure. Nevertheless, there is nothing disclosed within Omura, nor intuitively obvious from the design or functionality of Omura that would lead one to orient the distal end of the rigid arm of Omura beneath the table top. The stability of Lurie is achieved through a 'zero-moment' alignment of forces beneath the table top, and beneath the rigid interface member. The stability of Omura is a 'sum-of-the-moments' design, requiring that the rigid

interface member exerts a greater stabilizing force than the destabilizing force exerted by the purse overhanging the table edge.

#### DISCUSSION OF INDEPENDENT CLAIMS 1, 22 and 37

Claim 1 recites, in part:

**a rigid arm with** a proximal segment terminating at a proximal end, **a distal segment terminating at a distal end**, and a central extension disposed between a proximal segment and a distal segment, wherein the proximal end is coupled with the rigid interface member, the proximal segment being in a orientation substantially parallel to the planar interface area and curving into the central extension, **and wherein the central extension curves into the distal segment which extends vertically downward from the central extension** when the distal end is positioned vertically beneath the planar interface area; and,  
a flexible member with a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member

Independent Claim 22 recites, in part:

**a rigid arm with** a proximal segment terminating at a proximal end, **a distal segment terminating at a distal end**, and a central extension extending from a the proximal segment through a first bend, and extending into the distal segment through a second bend, the central extension being oriented, at least in part, in a direction different from the proximal segment, and in a direction different from the distal segment, the proximal end being coupled to said rigid interface member, **wherein the rigid arm is configured to position the distal segment in a vertical orientation that is vertically aligned beneath the rigid interface member when the rigid interface member is disposed on the horizontal surface.**  
a flexible member with first and second ends, said first end of said flexible member secured to said distal end of said rigid arm;

Independent Claim 37 recites, in part:

**a bent rigid arm with** a proximal segment terminating at a proximal end, and **a distal segment terminating at a distal end**, wherein the proximal segment is coupled to said interface member in an orientation substantially parallel to the planar interface area, **the rigid arm being configured such that the distal segment is aligned in a vertical orientation vertically beneath the planar**

***interface area when the planar interface area is horizontal, and wherein the distal end comprises a securement member;***

PLAIN ERROR IN CHARACTERIZING THE PRIOR ART: A MID POINT IS NOT THE DISTAL END

Within the Office Action, it was suggested that Lurie includes the element, "*wherein the central extension **curves into the distal segment which extends vertically downward from the central extension when the distal end is positioned vertically beneath the planar interface area.***" This limitation is taken from Claim 1. Independent Claims 22 and 37 include equivalent limitations. The following reason was offered within the Office Action: "Note that the distal end in this case, the examiner considers as segment 21, 22, 23 15 upon which a handbag, purse or the like can be supported or secured." (Office Action, January 10, 2008, page 2, last line through page 3, first two lines). Exhibit 2. A similar reason was advanced within the Office Action of Sept. 28, 2007, "Note that the distal end in this case, the Examiner considers as a hook segment (V-shaped) 23, 15, upon which a handbag, purse, or the like, can be supported or secured." (Office Action of Sept. 28, 2007, page 3, lines 6-7). Exhibit 3. Both quotes are drawn from Lurie, page 7, lines 6-14, which can be best understood further referring to Fig. 2 of Lurie.

"Support shaft 13 depends downwardly forming support arm 14 which is in a planar relationship with support shaft 13 (FIGURE 3). Support arm 14 is comprised of segments 20, 21 and hook 15. Segment 20 of support arm 14 is perpendicular to support shaft 13. Support arm 14 is deflected at 22 separating segments 20 and 21 whereby segment 21 of support arm 14 is oriented beneath housing 12. Segment 21 of ***support arm 14 depends upwardly at 23 forming hook 15 upon which a handbag, purse or the like can be supported (FIGURE 1).***" (Lurie, page 7, lines 6-14).

The "hook 15" described in Lurie, however, is not formed at the distal end of the rigid arm of Lurie. Rather, it is formed by the intersection of two segments of the rigid arm of Lurie.

Notwithstanding how the Examiner wishes to interpret the words of Independent Claims 1, 22 and 37, Merriam-Webster's Collegiate Dictionary, Tenth Edition, Copyright 2000, Springfield Mass. (hereinafter "Merriam-Webster") defines "distal" as "situated away from the point of attachment or origin of a central point, esp. of the body" (p. 336). (Exhibit 7). Merriam Webster further defines "end" as "a point that marks the extent of something," and "the point where something ceases to exist," (p. 380). (Exhibit 7). In view of the foregoing definitions:

1) Under no construction of the English language can the crux of the V-shaped element of the rigid arm of the Lurie purse hanger be defined as the "distal end", as suggested in both the Office Actions of September 28, 2007 and January 10, 2008.

2) Under no construction of the English language can four separate elements of Lurie, "21, 22, 23 15 upon which a handbag, purse or the like can be supported or secured" (Office Action, January 10, 2008") be construed as the distal end or the distal segment. (See Fig. 2 of Lurie). Moreover, none of the four elements 21, 22, 23 or 15 cited by the Examiner display a vertical orientation.

As defined both by the dictionary, and by any reasonable definition, the distal segment terminating in the distal end ("the point where something ceases to exist,") of the rigid arm of Lurie is the portion of the arm pointing at an upward angle *after* the V-shaped bend of Lurie. Appellant respectfully submits, therefore, that the rejection was predicated upon ***plain error*** by the Examiner, and that this element recited in the independent Claims are not present in Lurie, Omura, nor their combination. Appellant further submits that the Examiner's confusion in the matter is further evidence that this element is not obvious.

PLAIN ERROR IN CHARACTERIZING THE PRIOR ART: HORIZONTAL IS NOT THE SAME  
AS VERTICAL

Within the Office Action, it was suggested that Lurie includes the element, ***"wherein the central extension curves into the distal segment which extends vertically downward from the central extension when the distal end is positioned vertically beneath the planar interface area "*** (recited herein from Claim 1, with equivalent limitations in Independent Claims 22 and 37).

Appellant respectfully submits respectfully submits that the Examiner's characterization of Lurie is, prima facie, simply wrong, lacking rigor and credibility, and inconsistent with the plain meaning of the English language. Of the five elements of the Lurie rigid arm, 20, 21, 22, 23 and 15, cited by the Examiner on page 2 of the Office Action of January 10, 2008, only one, element 20, displays a vertical orientation, and this element is adjacent the table top, as seen in Fig. 2 and discussed on page 7, lines 9-10 of Lurie. It is not beneath the rigid interface member of Lurie. No segment of the rigid arm of Lurie disposed beneath the rigid interface member is oriented vertically, and the distal segment of the rigid arm of Lurie bends at an *upward* angle. *"Support arm 14 is deflected **upwardly** into a hook 15 upon which handbag 11 is hung"* (Lurie, page 6, italics and bold added). As noted above, independent claim 1 includes the limitation of a "distal segment which extends vertically downward." Claim 22 similarly recites "wherein the rigid arm is configured to position the distal segment in a vertical orientation," and claim 37 recites wherein "the rigid arm being configured such that the distal segment is aligned in a vertical orientation."

Therefore, even assuming, arguendo, that the 'V-Shaped' segment of the rigid arm of Lurie somehow corresponds to the "distal end" recited in Claim 1, as suggested by the Examiner, the basic laws of calculus (max-min theory) require that the slope of the rigid arm of Lurie is zero (0) at the V-

crux (the lowest point) of the rigid arm of Lurie (Calculus of a Single Variable, Swokosky, Olinick, Pence and Cole, PWS Publishing Co., Boston, 1994 Edition, page 248). Exhibit 8. This means that the crux (bottom) of the V-shaped bend of the rigid arm of Lurie is exactly horizontal, not vertical. Not segment of the Lurie rigid arm beneath the Lurie rigid interface member is vertical, as recited in independent claims 1, 22 and 37. The distal segment of Lurie is oriented at an upward angle.

The Examiner proposes hanging the flexible member of Omura from a section of the Lurie rigid arm that is exactly horizontal. Under no construction of the English language can horizontal mean vertical. They are as distinct from each other as is geometrically possible in Cartesian mathematics. To reject independent claims 1, 22 and 37 as obvious over Lurie in view of Omura, predicated on the logic that vertical and horizontal mean the same thing, is to do violence to the English language, and to the entire field of geometry.

Because neither Lurie, Omura, nor their combination disclose or suggest a rigid arm bending into a distal segment configured to orient itself vertically beneath the rigid interface member in operation, as recited in claims 1, 22 and 37, even if Lurie and Omura could somehow be combined in a manner suggested by the examiner, their combination still would not establish a prima facie case of obviousness. The rejection is therefore predicated on *plain error* by the Examiner. In view of this plain error, Appellant respectfully submits that independent Claims 1, 22 and 37 stand in condition of allowance over the cited art.

#### NO PRIMA FACIE CASE FOR OBVIOUSNESS

A rigid arm bending into a vertical alignment beneath the rigid interface area is not found in either Lurie or Omura. It is a novel concept disclosed only in the Application under appeal. The fact



that the Appellant's design may seem simple in the hindsight of the Examiner is not grounds for rejection under 35 U.S.C. § 103.

In the instant application, the examiner has done little more than cite references to show that one or more elements or subcombinations thereof, when each is viewed in a vacuum, is known. The claimed invention, however, is clearly directed to a combination of elements. That is to say, appellant does not claim that he has invented one or more new elements but has presented claims to a new combination of elements. To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination *or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.* . . . Based upon the record before us, we are convinced that the artisan would not have found it obvious to selectively pick and choose elements or concepts from the various references so as to arrive at the claimed invention without using the claims as a guide. *It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness.*"

*Ex parte Clapp*, 227 USPQ 972, 973 (B.P.A.I. 1985), italics and bold added for emphasis.

"There was no suggestion in the prior art to provided Deminski with the motivation to design the valve assembly so that it would be removable as a unit. The board argues that if Peacock had followed the "common practice" of attaching the valve stem to the valve structure, then the valve assembly would be removable as a unit. *The only way the board could have arrived at its conclusion was through hindsight analysis by reading into the art Deminski's own teachings. Hindsight analysis is clearly improper, since the statutory test is whether the subject matter as a whole would have been obvious at the time the invention was made.*"

*In re Deminski* 230 USPQ 313 at 316, Decided July 8, 1986.

#### COMBINATION TEACHING AWAY FROM STATED PURPOSE

The combination of Lurie and Omura, as suggested by the Examiner, teaches away from a stated purpose of the Application recited on page 2 of the Application.

"Prior art purse hangers that are carried in a purse are easily lost within the purse, and difficult to find among other various items stored within a purse . . . .

There remains therefore a need for a purse holder that can easily be located without becoming lost in the purse of a user."

(Application, Page 2, lines 1-6, Exhibit 1).

The limitations recited in Claims 1, 22 and 37 of the Application satisfy this stated purpose by coupling the flexible member to the rigid arm, so that a user can, by feel, find the rigid arm and rigid interface member of the purse hanger. The Office Action of January 10, 2008 suggests that the flexible member of Omura can be somehow suspended from the rigid arm of Lurie. However, the design would be unworkable, and would fail to satisfy the stated purpose recited above. Figs. 1 and 3 of Omura disclose a ring 7 functioning as a connection link between the flexible member 6 of Omura and the rigid arm 3 of Omura. The rigid arm of Lurie is a rigid cylindrical wire member. Assuming, *arguendo*, that the wire ring 7 (Figs. 1, 3) of Omura were slid onto the distal end 15 of the rigid wire arm of Lurie (Lurie, Fig. 2), and dangled from the “V-hook” 23, the wire ring of Omura would be free to slide up and down the rigid wire arm of Lurie. When in use, gravity would keep the wire ring 7 of Omura in the V-hook of Omura. However, if a user were to store the rigid interface member 12 of Lurie (Fig. 2) within a purse, the Omura ring 7 would be free to slide off the distal end of Lurie, requiring the user to rummage about her purse to locate the Lurie portion of this combination. No design features have been cited by the Examiner to prevent this problem when attempting to combine the teachings of Lurie and Omura. Accordingly, even if Lurie and Omura could somehow be combined in a manner suggested by the Examiner, their combination would be teaching away from the stated purposes achieved by the elements recited in independent claims 1, 22 and 37. Referring to the *United States v. Adams*, 383 U.S. 39, 40 (148 USPQ 479, 1966), the Supreme Court has recently reaffirmed in *KSR International Co. v. Teleflex, Inc* the implication of combinations that are teaching away from the claimed invention.

“The Court relied upon the corollary principle that when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.”

KSR International Co. v. Teleflex Inc., 82 USPT2d 1385 at 1395. In light of this ruling, the fact that the combination of Lurie and Omura teach away from the claimed invention is sufficient, by itself, to rebut any conclusion of obviousness.

#### LONG FELT MARKET NEED

Submitted herewith as Exhibit 9, US Patent 2,064,133 to Von Schroeder (hereinafter “Von Schroeder”), is directed is a purse hanger. The Von Schroeder patent issued December 15, 1936. Accordingly, purse hangers have been part of the market economy of the United States since at least 1936. Nevertheless, until the present application, no prior art of any nation discloses a functional purse hanger that can be located in a user’s purse by ‘feel’ by tracing a flexible connector to the rigid interface member.

Referring to the *Gram v. John Deere Co. of Kansas City*, 383 U.S. 1 [148 USPQ 459] (1966), the Supreme Court recently reaffirmed in *KSR International Co. v. Teleflex, Inc* that long felt market needs are evidence of nonobviousness.

“In *Gram v. John Deere Co. of Kansas City*, 383 U.S. 1 [148 USPQ 459] (1966) the Court set out a framework for applying the statutory language of § 103, language itself based on the logic of the earlier decision in *Hotchkiss v. Greenwall*, 11 How. 248 (1851), and its progeny. See 383 U.S., at 15-17. The analysis is objective:

“Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unresolved needs, failure of others, etc. might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Id.* At 17-18

While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls.

KSR International Co. v. Teleflex Inc. USPQ2d 1385 at 1391. Appellant submits that this long felt market need demonstrates the nonobviousness of the subject matter recited in independent claims 1, 22 and 37.

#### NO MOTIVATION TO COMBINE

The 1992 Lurie disclosure presents a 'zero moment' design wherein the center of gravity of the purse is aligned with the rigid interface member. Lurie did not anticipate, nor seek to address the problem of finding a purse hanger stored in a purse between uses.

The 1996 Omura disclosure does not disclose or suggest a "zero moment" design aligning the center of gravity of the purse beneath the rigid interface member, even though the Lurie disclosure was available to Omura. Rather, the design of the Omura apparatus requires that, to support a purse, the moment exerted by the weight of the rigid interface member (the stabilizing moment, clockwise with respect to Omura Fig. 4) must be greater than the destabilizing moment exerted by the weight of the purse (counter clock wise with respect to Omura Fig. 4). To attempt to position the distal end of the rigid arm ("iron bar" 3) of Omura beneath the table would move the Omura purse further from the table edge, increasing the destabilizing moment, decreasing the stabilizing moment, thereby further destabilizing the Omura purse hanger.

Other than the raw concept of a "purse hanger," there are no design goals common to Lurie and Omura. In view of this distinction, Appellant respectfully submits that no motivation to combine the teachings of Omura and Lurie can be divined from either of these disclosures, and that any such motivation can therefore only be read into them by the Examiner. This principle is illustrated, for example, in Heidelberg Druckmaschine AG v. Hantscho Commercial Products, Inc., cited below:

When the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.

*Heidelberger Druckmaschinen AG v. Hantscho Commercial Products, Inc.*, 30 USPQ 2d 1377, 1379-80 (Fed. Cir. 1994).

Because the two purse hangers operated on different theories, one on a “zero moment” design, and the other on a counter-balance device to overcome the moment exerted by the purse, the technological reasons to combine these patents are less than obvious. The fact is, Lurie was available when the Omura application was filed, but it was not referenced, nor was there any suggestion of utilizing a zero moment design. Apart from the general goal of supporting a purse, there is not a single goal of the Omura design common to the goals achieved by the Lurie design. In view of this fact, neither Omura nor Lurie can be construed as recite a motivation to combine them. The bare fact that they are both purse hangers is not a motivation.

## DISCUSSION OF DEPENDENT CLAIM 2

Claim 2 recites,

The purse hanger according to claim 1 wherein the distal end of said rigid arm is oriented vertically beneath the geometric center of said planar interface area.

Neither Lurie nor Omura disclose or suggest the limitation “wherein the distal end of said rigid arm is oriented vertically beneath the geometric center of said planar interface area.” As discussed in the Application, the term “planar interface area” (23, 28) is not automatically synonymous with the rigid interface member. It may represent the area of felt, rubber, or cork interface having an area smaller than the bottom surface of the rigid interface member (Figs. 2, 12, 13), and may even include embodiments in which the geometric center of the planar interface area is

beneath a hollow center area of a wire frame rigid member (no physical member of the purse hanger (Fig. 18). The concept of a planar interface area distinct from the rigid interface member is not disclosed, or even remotely suggested by Lurie or Omura. Therefore, even if Lurie and Omura could somehow be combined in a manner suggested by the Examiner, their combination still would not disclose or suggest this element.

For at least these reasons, Appellant respectfully submits that claim 2 stands allowable over Lurie, Omura, and their combination.

#### DISCUSSION OF DEPENDENT CLAIM 13

Claim 13 recites,

“The purse hanger according to claim 1 wherein the first end of the flexible member is coupled to the distal end of the rigid arm by a swivel joint.”

Within the Office Action, the rejection of claim 13 was predicated on the following statement:

“Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting around the flexible member and thus the handbag/purse to turn around in a horizontal plane.” (Office Action of January 10, 2008, page 4, lines 1-5).

#### NO PRIMA FACIE CASE IN VIEW OF PLAIN ERROR

Appellant respectfully disagrees. The specification fully comprehends the meaning of a “swivel” member, and further, makes clear that this function allows the purse to “spin,” not simply pivot.

“When a purse 80 hangs from a purse hanger as in FIG. 1, an impact against the purse 80, such as might be imparted from a knee or chair, can impart a torque to the purse which can be transmitted to the interface member 22, dislodging it from the tabletop 21. Such torque, however, can be dissipated by allowing the purse to spin when impacted by a knee or chair. The flexible member 60, therefore, should include at least one swivel member. FIG. 5 shows a purse hanger with a swivel engagement in the upper flex coupling 61, and a flexible member 60 in the form of a swivel ball chain. FIG. 2 shows a purse hanger with swivel engagements for the upper flex coupling 61 and the lower flexible coupling 62, as well as a swivel ball chain for the flexible member. FIG. 6 is an enlarged view of a swivel ball chain that can detachably connect to the upper flexible member coupling 61.”

. . . Because a high tensile strength core such as steel rope will impart torque when twisted, and will not release the torque through swiveling, embodiments comprising a non-swiveling flexible member such as FIGS. 16 and 17 comprise non-swivelable flexible members 60 connected with swivelable upper flexible member coupling 61 and lower flexible member coupling 62.

(Application, page 13, lines 9-18, 26-30). Accordingly, within the Application, a “swivel” is configured to dissipate torque by “allowing the purse to *spin* when impacted by a knee or chair.”

This definition and usage is wholly consistent with the meaning of a “swivel” by various lexical authorities. For example, “swivel” is defined in dictionary.reference.com as follows:

<http://dictionary.reference.com/browse/swivel>

6 dictionary results for: swivel

Dictionary.com Unabridged (v 1.1) - Cite This Source - Share This

swiv·el /'swɪv əl/ Pronunciation Key - Show Spelled Pronunciation[swiv-uh l] Pronunciation Key - Show IPA Pronunciation noun, verb, -eled, -el·ing or (especially British) -elled, -el·ing.

—noun

1. a fastening device that allows the thing fastened to turn around freely upon it, esp. to turn in a full circle.
2. such a device consisting of two parts, each of which turns around independently, as a compound link of a chain, one part of which turns freely in the other by means of a headed pin or the like.

(Exhibit 10, <http://dictionary.reference.com/browse/swivel>)

Webster's Revised Unabridged Dictionary cited on page 3 of Exhibit 10 is specifically directed to a “swivel joint,” the exact term used in claims 13 and 14, defined accordingly:

Swivel joint, a joint, the two pieces composing which turn round, with respect to each other, *on a longitudinal pin or axis, as in a chain, to prevent twisting.*

A verified translation of Omura, submitted to the Examiner on March 20<sup>th</sup> 2006, is submitted herewith as Exhibit 6. Nothing within Omura discloses or suggests that the connection ring 7 is capable of swiveling (spinning) as defined in the Appellant's disclosure, or within the dictionary reference above. On the contrary, an examination of Fig. 1 of Omura discloses that ring 7 passes through a hole in the "iron bar" 3. This configuration is not capable of swiveling, and an application of torsion to the flexible member 8 of Omura would transmit the torsion to ring 7, which would transmit its force against the hole in the iron bar 3, splitting the ring 7 and ripping it out of the hole in the iron bar. This is basic physics. Under no construction of the English language can the Omura ring be construed as a swivel joint.

Therefore, even if Lurie and Omura could somehow be combined in a manner suggested by the Examiner, their combination still would not include this element, and therefore, cannot establish a *prima facie* case for obviousness of claim 13. There is no swivel joint in Lurie, Omura, or their combination. The rejection of claim 13, therefore, is predicated upon *plain error* of the Examiner in the interpretation of the term "swivel joint" within the claim, and/or attributing such functionality to ring 7 of Omura. In view of this plain error, Appellant submits that claim 13 stands in condition for allowance.

## UNEXPECTED RESULTS

As disclosed in the Declaration of Lenna Bauerly Under 37 CFR 1.116(e) and 1.68 (Exhibit 11), the Appellant/Inventor pursued numerous experimental designs to achieve stability of the purse hanger, preventing the purse hanger from being knocked off a table when being brushed or hit. The resistance afforded by cork and rubber contact members on the rigid interface member was not sufficient to achieve stability in normal environmental conditions involving bumping of a purse. Designs bending the arm a significant distance to place the entire purse beneath the table proved



impractical in their design and size. The Inventor/Appellant eventually discovered that this design objective could be best achieved by a swivel joint. The experimentation pursued by the inventor demonstrates that the solution to this problem was, in fact, not obvious. The weight of purses, friction imparted by various surfaces on the underside of the rigid interface member, and the friction of a swivel joint, are variables. The experimentation to identify a workable design is prima facie evidence for non-obviousness.

If the Appellant had fully expected from the beginning which design feature would have been the most effective, the Appellant would not have found it necessary to experiment with various designs to see which was most effective.

#### DISCUSSION OF DEPENDENT CLAIM 14

Claim 14 recites,

“The purse hanger according to claim 1 wherein the second end of the flexible member is coupled to the purse engagement member by a swivel joint.”

The rejection of claim 14 was predicated on the statement “The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.” (Office Action of January 10, 2008, page 4, lines 8-10). Appellant submits that, for reasons stated above in conjunction with claim 13, the Examiner is in plain error. Neither Omura, Lurie, nor their combination disclose or suggest that the connection “connection link” 9 of Omura is coupled to the “ring loop” 8 in a swivelable engagement.

In view of this plain error, Appellant respectfully submits that no prima facie case for obviousness has been established. For at least these reasons, Appellant submits that claim 14 stands in condition for allowance.

## CLAIM APPENDIX

- 1 1. (Currently Amended) A purse hanger comprising:
- 2 a) a rigid interface member defining a planar interface area;
- 3 b) a rigid arm with a proximal segment terminating at a proximal end, a distal
- 4 segment terminating at a distal end, and a central extension disposed between a
- 5 proximal segment and a distal segment, wherein the proximal end is coupled
- 6 with the rigid interface member, the proximal segment being in a orientation
- 7 substantially parallel to the planar interface area and curving into the central
- 8 extension, and wherein the central extension curves into the distal segment
- 9 which extends vertically downward from the central extension when the distal
- 10 end is positioned vertically beneath the planar interface area; and,
- 11 c) a flexible member with a first end coupled to the distal end of the rigid arm,
- 12 and a second end coupled to a purse engagement member.

- 1 2. (Previously Presented) The purse hanger according to claim 1 wherein the distal
- 2 end of said rigid arm is oriented vertically beneath the geometric center of said planar
- 3 interface area.

- 1 3. (Cancel)

- 1 4. (Original) The purse hanger according to claim 1 wherein the rigid arm is
- 2 swivelably coupled with the rigid interface member.

1 5. (Withdrawn) The purse hanger according to claim 1 wherein the rigid arm is  
2 detachably coupled with the rigid interface member.

1 6. (Withdrawn) The purse hanger according to claim 1 wherein the rigid interface  
2 member has a storage cavity.

1 7. (Withdrawn) The purse hanger according to claim 6 further comprising storage  
2 members stored in said storage cavity, said storage members being selected from  
3 among a group consisting of lip gloss, foundation, make up, vitamins, drugs, a  
4 condom, modular inserts, a timepiece, a cellular telephone, a camera and combinations  
5 thereof.

1 8. (Withdrawn) The purse hanger according to claim 6 further comprising a cover for  
2 covering said storage cavity, and securement means for securing said cover to said  
3 rigid interface member.

1 9. (Withdrawn) The purse hanger according to claim 8 wherein said securement means  
2 is selected from among a group consisting of snaps, clasps, hooks, hinges, magnets,  
3 threaded members, and combinations thereof.

1 10. (Original) The purse hanger according to claim 1 wherein said rigid arm  
2 comprises a horizontal extension parallel with said planar interface area.

1 11. (Original) The purse hanger according to claim 10 wherein the rigid arm  
2 comprises a vertical extension that is about perpendicular to said horizontal extension.

1 12. (Original) The purse hanger according to claim 11 wherein the vertical extension  
2 has a lengthening means for altering a length of the vertical extension.

1 13. (Original) The purse hanger according to claim 1 wherein the first end of the  
2 flexible member is coupled to the distal end of the rigid arm by a swivel joint.

1 14. (Original) The purse hanger according to claim 1 wherein the second end of the  
2 flexible member is coupled to the purse engagement member by a swivel joint.

1 15. (Original) The purse hanger according to claim 1 wherein the purse engagement  
2 member is a rigid loop.

1 16. (Original) The purse hanger according to claim 15 wherein the rigid loop is a  
2 single continuous loop.

1 17. (Original) The purse hanger according to claim 15 wherein the rigid loop is a  
2 formed from a movable loop member movably engaged to a primary loop member,  
3 wherein, when the movable loop member is in a first position, the rigid loop is a  
4 closed loop, and when the movable loop member is in a second position, the rigid loop  
5 is an open loop.

1 18. (Previously Presented) The purse hanger according to claim 17 wherein the  
2 movable loop member is movably engaged to the primary loop member through a  
3 pivot member.

1 19. (Withdrawn) The purse hanger according to claim 17 wherein the movable loop  
2 member is slidably engaged to the primary loop member through a slide means.

1 20. (Withdrawn) The purse hanger according to claim 19 wherein said slide means  
2 includes a tubular member into which the movable loop member can retract.

1 21. (Original) The purse hanger according to claim 17 further comprising a spring  
2 member for urging said movable loop member toward said first position.

1 22. (Currently Amended) In combination:

2 a) a horizontal surface; and

3 b) a purse hanger for hanging a purse from a horizontal surface, the purse hanger  
4 comprising:

5 (i) a rigid interface member with a planar interface configured to  
6 rest on said horizontal surface;

7 (ii) a rigid arm with a proximal segment terminating at a proximal  
8 end, a distal segment terminating at a distal end, and a central  
9 extension extending from the proximal segment through a

10 first bend, and extending into the distal segment through a  
11 second bend, the central extension being oriented, at least in  
12 part, in a direction different from the proximal segment, and in a  
13 direction different from the distal segment, the proximal end  
14 being coupled to said rigid interface member, wherein the rigid  
15 arm is configured to position the distal segment in a vertical  
16 orientation that is vertically aligned beneath the rigid interface  
17 member when the rigid interface member is disposed on the  
18 horizontal surface.

19 c) a flexible member with first and second ends, said first end of said flexible  
20 member secured to said distal end of said rigid arm; and

21 d) a purse engagement member coupled with said second end of said flexible  
22 member.

1 23. (Original) The purse hanger of claim 22 wherein the flexible member is at least  
2 one inch long.

1 24. (Original) The purse hanger of claim 22 wherein said purse engagement member  
2 is a rigid loop.

1 25. (Original) The purse hanger of claim 24 wherein the rigid loop comprises a  
2 primary loop member coupled to a movable loop member, said movable loop member

1 being movable between first and second positions, wherein, in said first position, said  
2 rigid loop is a closed loop, and in said second position, said rigid loop is an open loop.

1 26. (Original) The purse hanger of claim 25 further comprising a spring member  
2 engaged with said primary loop member and with said movable loop member to urge  
3 said movable loop member to said first position.

1 27. (Previously Presented) The purse hanger according to claim 22 wherein said  
2 rigid arm has a lengthening member.

1 28. (Previously Presented) The purse hanger according to claim 27 wherein said  
2 lengthening member comprises a turnbuckle.

1 29. (Withdrawn) The purse hanger according to claim 22 further comprising a storage  
2 cavity within said rigid interface member.

1 30. (Withdrawn) The purse hanger according to claim 29 further comprising a cover for  
2 covering said storage cavity, and a cover engagement means for engaging said cover  
3 to said rigid interface member.

1 31. (Withdrawn) The purse hanger of claim 30 wherein the cover engagement means is  
2 selected from among a group consisting of hinges, clasps, threaded members, chains,  
3 clips, and combinations thereof.

1 32. (Withdrawn) The purse hanger according to claim 29 further comprising storage  
2 members stored within said storage cavity, said storage members selected from among  
3 a group consisting of lip gloss, foundation, modular dividers, vitamins, prescription  
4 medication, a condom, a cell phone, a time piece, a camera, and combinations thereof.

33. (Cancelled)

34. (Cancelled)

1 35. (Withdrawn) The purse hanger according to claim 8 further comprising a mirror on  
2 a surface of said cover.

1 36. (Withdrawn) The purse hanger according to claim 30 further comprising a mirror on  
2 a surface of said cover.

1 37. (Currently Amended) A purse hanger comprising:  
2 a) a rigid interface member with a planar interface area;  
3 b) a bent rigid arm with a proximal segment terminating at a proximal  
4 end, and a distal segment terminating at a distal end, wherein the proximal segment is  
5 coupled to said interface member in an orientation substantially parallel to the planar  
6 interface area, the rigid arm being configured such that the distal segment is aligned in  
7 a vertical orientation vertically beneath the planar interface area when the planar  
8 interface area is horizontal, and wherein the distal end comprises a securement  
9 member;



10                   c)     a flexible member with first and second ends, said first end of said  
11                   flexible member secured to the securement member; and  
12                   d)     a purse engagement member coupled with said second end of said  
13                   flexible member.

1   38.   (Currently Amended) The purse hanger or claim 37 wherein the rigid arm comprises a  
2   central segment disposed between the proximal segment and the distal segment, the central  
3   segment comprising a vertical extension.

1   39.   (Withdrawn) The purse hanger of claim 37 wherein at least one bend within the rigid  
2   arm comprises a large progressive curve.

3   40.   (Cancel)

1   41.   (Currently Amended) The purse hanger of claim 38 wherein the proximal segment of  
2   the rigid arm is swivelably coupled to the rigid interface member while rigidly fixed along a  
3   horizontal line relative to a surface of the rigid interface member.

## EVIDENCE APPENDIX

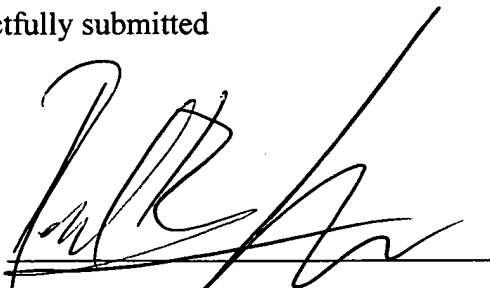
- |            |  |
|------------|--|
| Exhibit 1  | U.S. Patent Application 10/763,426 as Filed  |
| Exhibit 2  | Office Action, January 10, 2008  |
| Exhibit 3  | Office Action of Sept. 28, 2007  |
| Exhibit 4  | British Patent Application GB 2,253,998 to Lurie   |
| Exhibit 5  | Abstract of Japanese Application 10-113275 JP to Omura   |
| Exhibit 6  | Japanese Application 10-113275 JP to Omura   |
| Exhibit 7  | Verified Translation of Japanese Application 10-113275 JP to Omura   |
| Exhibit 8  | Merriam-Webster's Collegiate Dictionary, Tenth Edition, Copyright 2000, Springfield Mass., Title page, pages 336, 380  |
| Exhibit 9  | (Calculus of a Single Variable, Swokosky, Olinick, Pence and Cole, PWS Publishing Co., Boston, 1994 Edition, page 248, |
| Exhibit 10 | US Patent 2,064,133 to Von Schroeder, December 15, 1936  |
| Exhibit 11 | URL page <a href="http://dictionary.reference.com/browse/swivel">http://dictionary.reference.com/browse/swivel</a>     |
| Exhibit 12 | Declaration of Lenna Bauerly Under 37 CFR 1.116(e) and 1.68  |

RELATED PROCEEDINGS APPENDIX

None

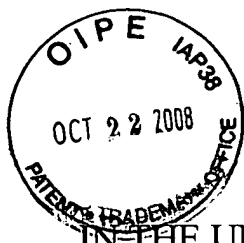
Respectfully submitted

By:

  
Ronald R. Shea, Reg. No 45,098

Dated:

4 Oct 2008



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:	)	Examiner: Le, Tan
	)	
Shelly Lenna Bauerly	)	Group Art Unit: 3632
	)	
Application Serial No. 10/763,426	)	<b>Evidence Appendix for Appeal Brief</b>
	)	<b>under 37 CFR 41.37</b>
Filed: January 23, 2004	)	
	)	
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**EVIDENCE APPENDIX**

Submitted in conjunction with the Appeal Brief under 37 CFR 41.37 for U.S. Patent Application 10/763,426.

## PURSE HANGER

### BACKGROUND OF THE INVENTION

5

#### Field of the Invention

The present invention is directed to the field of mechanical devices. More particularly, the present invention is directed to a purse hanger for hanging purses and handbags from tabletops and surfaces.

10

#### Description of the Prior Art

At coffeehouses, restaurants, bars, or indoor and outdoor cafes, people crowd at tables with limited space. In addition to space for food and drink, table tops are often called upon to support ash trays, chess boards, books, newspapers, etc. Those who carry purses and handbags often crowd their handbags into the center of the table. Purses and handbags on a tabletop reduce the space on the tabletop, and are an annoyance when reaching for food, drink, or other items. Some handbag users choose to sit with their handbags on their respective laps, creating a less than leisurely atmosphere. Others elect to place their handbag on the floor or sidewalk next to their chair, under their chair, or beneath the table. Multiple inconveniences abound from these options, however. Floors and sidewalks are often unsanitary, and wholly unsuitable for contact with anything other than the bottom of one's shoe. Additionally, purses and handbags which are placed next to or under a chair are completely out of the line of sight of the owner, and can be stolen without the knowledge of the owner until it is time to leave. Even when not stolen, the vigilance required to continually check on a purse or handbag beneath a chair again detracts from the leisure and pleasure of a café or restaurant experience.

Purse hangers for hanging a purse from a table often align the weight of a purse in an unstable position, causing the purse holder to slide off the table. Bolting or fastening a purse hanger to a table top prevents a purse hanger from sliding off the table, but are only useful

when a purse owner sits at the table fitted with the fixed-in-place purse hanger. Prior art purse hangers that are carried in a purse are easily lost within the purse, and difficult to find among other various items stored within a purse.

5        There remains therefore a need for a purse holder that can easily be located without becoming lost in the purse of a user. There is also a need for a purse holder that will not readily slide off a tabletop.

### **BRIEF SUMMARY OF THE INVENTION**

10

According to an embodiment of the invention, a purse hanger for hanging a purse from a flat surface comprises a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface. A rigid arm has a proximal end coupled with the rigid interface member and a distal end oriented vertically beneath the planar interface area. The proximal end can be swivelably coupled to the rigid interface member, or fixedly coupled, according to alternative embodiments. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member for engaging a strap of a purse.

20        According to one embodiment, the rigid arm is detachably coupled with the rigid interface member.

The rigid interface member can have a storage cavity, which can contain various personal items including, but not limited to one or more shades of lip gloss, foundation, make up, vitamins, drugs, a timepiece, a cellular telephone, a camera and combinations thereof. The storage cavity can be divided into multiple storage spaces by modular inserts.

25        A cover for covering the storage cavity has a securement means for securing the cover to the rigid interface member. The securement means may include, but is not limited to snaps, clasps, hooks, hinges, magnets, threaded members, and combinations thereof.

30

The rigid arm can include a horizontal extension parallel with the planar interface area, and a vertical extension that is about perpendicular to the horizontal extension.

The vertical extension can include a lengthening means for altering a length of the vertical extension. The flexible member will preferably have at least one swivel joint, which can  
5 include a top swivel member coupled to the distal end of the rigid arm, a bottom swivel member coupled to the purse engagement member, or a swivel link.

The purse engagement member is advantageously formed from a rigid loop having a movable loop member movably engaged to a primary loop member. When the movable loop  
10 member is in a first position, the purse engagement loop is a closed loop, and when the movable loop member is in a second position, the purse engagement member is an open loop. The movable loop member can be movably engaged to the primary loop member through a pivot means or through a slide means, such as a tubular member into which the movable loop member can retract. A spring member urges the movable loop member toward the first  
15 position.

A method for storing a purse hanger comprises the steps of securing the purse engagement member to a purse handle, opening the purse, flexing the flexible member, and, placing the rigid interface member within the purse, wherein the purse engagement member  
20 remains secured to the purse strap.

### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**

FIG. 1 is an isometric view of a purse supported from a table by the purse holder of  
25 the present invention.

FIG. 2 is an enlarged isometric view of an embodiment of the purse holder of FIG. 1 with a hinged movable loop member.

30 FIG. 3 is an isometric view of the purse holder of FIG. 1 partially stored within a purse while the purse engagement loop remains engaged to a purse handle.



FIG. 4 is an isometric view of the purse holder of FIG. 1 partially stored within a purse while the purse engagement loop remains engaged to a purse handle.

5        FIG. 5 is a top plan embodiment of the purse holder of FIG. 1 having a timepiece within the rigid interface member and a slide opening purse engagement member.

FIG. 6 is an isometric view of the flexible member of the purse holder of FIG. 1 comprising a swivel ball chain swivelably secured to an upper flexible member coupling.

10

FIG. 7 is an isometric view of a vertical extension portion of a rigid arm of the purse holder of FIG. 1 with a turnbuckle for adjusting the vertical length of the rigid arm.

15        FIG. 8 is a cross sectional view of the turnbuckle of FIG. 7 showing the interior thread engagement with the vertical extension.

FIG. 9 is an isometric view of an embodiment of the rigid interface member of FIG. 1 having a neck comprising a detachable ball and assembly.

20        FIG. 10 is an isolated view of the rigid interface member of FIG. 1 swiveling about the rigid arm.

FIG. 11 is a cross sectional top plan view of a threaded neck embodiment of the purse holder of FIG. 1 engaged with a threaded rigid arm.

25

FIG. 12 is a rear elevational view of the purse holder of FIG. 1 showing a swivel engagement of the rigid interface member with the rigid arm.

30        FIG. 13 is a front elevational view of an embodiment of the purse holder of FIG. 1 showing a hinged cover coupled to the top end of the rigid interface member and padding coupled to a bottom surface of the rigid interface member.

FIG. 14. is an isometric view of an embodiment of the purse holder of FIG. 13 with a mirror formed in the cover and lip gloss in the rigid interface embodiment.

5        FIG. 15 is a top plan view an embodiment of the purse holder of FIG. 1 with an enlarged knob and choke flange securing the rigid interface member to the rigid arm.

FIG. 16 an isometric view of the purse holder of FIG. 1 with a threaded cover and modular insert members fitting inside the rigid interface member, and a flexible member  
10        comprising gold braid surrounding a high tensile strength core.

FIG. 16a is a cross sectional view of the flexible member of FIG. 16.

FIG. 17 is an embodiment of the flexible member of FIG. 1 comprised of pearls strung  
15        around a high tensile strength core.

FIG. 18 is an alternative embodiment of a purse hanger having a rigid interface member comprising a frame with multiple legs.

20        FIG. 19 is the purse hanger of FIG. 1 having a rigid arm with a progressive curve.

## **DETAILED DESCRIPTION OF THE INVENTION**

### **Overview**

25        Referring primarily to FIGS. 1 and 2, a purse hanger 20 for hanging a purse 80 from a horizontal surface such as a tabletop 21 has a rigid interface member 22. As used herein, the term purse includes any handbag device having at least one handle 81 for carrying by hand, or for looping over a shoulder, and a compartment area for carrying personal items and chattels.

30        A rigid arm 45 extends horizontally outward from the rigid interface member. The rigid arm 45 has a proximal end 46 and a distal end 55. The proximal end is coupled to the

neck 38 of the rigid interface member 22. Preferably, the neck is pivotably coupled to the rigid arm, thereby allowing the distal end to pivot to a lowest gravitational position. Embodiments are envisioned, however, wherein the rigid arm 45 is secured to the neck 38 in a non-pivoting relationship.

5

The rigid interface member 22 has a planar interface area 23. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom surface of a pad 28 in contact with the tabletop 21. In the embodiment of FIG. 18,  
10 the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87. As discussed in greater detail herein, a purse will hang in a stable orientation from a purse hanger 20 if the distal end 55 of the rigid arm 45 is positioned vertically beneath the planar interface area 23.

15 A flexible member 60 is secured to the distal end 55 through an upper flexible member coupling 61, and to a purse engagement member shown as a rigid loop 70 through a lower flexible member coupling 62. One or more straps 81 of a purse 80 are placed within the rigid loop. The rigid interface member 22 is placed on a table top, and the purse hangs from the table top, suspended by the purse holder. Certain prior art purse holders have suspended a  
20 purse strap from the tip of a metal rod, potentially damaging or even poking a hole in an expensive purse strap. Because the strap rests in a rigid loop, the present invention does not inflict damage to purse straps.

A common inconvenience of prior art purse holders has been that, when stored within  
25 the purse, subsequent use requires searching for the purse holder amidst a purse full of personal items, or abandoning the search and storing the handbag or purse below the table or in a traditional manner. An advantage of the present invention is the flexible member 60. Referring primarily to FIGS. 3 and 4, when the purse hanger is not in use, the flexible member 60 of the present invention allows most of the purse hanger 20 to be stored inside the  
30 purse 80 while the purse engagement member 70 remains secured to a purse strap 81. Because the purse hanger can be easily located in the purse due to its connection to the purse

strap 81, the purse holder is easily located no matter how many personal items are stored in a purse.

### The Interface Member

5 Referring primarily to FIGS. 5 and 9-16, the rigid interface member 22 has a flat bottom surface 24 defining the planar interface 23 for resting parallel to a tabletop 21. The planar interface area 23 can be coextensive with the bottom surface 24 of the rigid interface member, as shown in FIG. 2, or can be defined by padding 28 attached to the bottom surface, as shown in FIG. 13 and discussed further below.

10 An alternative embodiment shown in FIG. 18 includes a multi-leg embodiment 25 of a rigid interface member comprising a frame 26 with three legs 87 extending therefrom. The distal ends of the legs individually interface with a tabletop 21, and thereby define a geometric plane which includes the planar interface 23.

15 As best seen in FIGS. 12, 13 and 18, a layer of padding 28 established an optimal frictional contact with a table top 21, and avoids scratching table surfaces. The padding can be formed from a variety of materials, including but not limited to felt, cork, rubber, or other materials. Those skilled in the art will recognize that in embodiments utilizing layer of padding, the planar interface 23 is technically established by the padding, not the rigid  
20 interface member 22 or the distal ends of the legs 87.

According to one embodiment, the rigid interface member 22 releasably couples to a cover 29 by a securement means, shown in FIGS. 5, and 14 as a clasp and hinge assembly.

25 An upper clasp 32 on the cover engages a lower clasp 33 on the rigid interface member to secure the cover in place. When the clasp release 34 is pressed by a user, the clasp assembly releases the cover from the rigid interface member. According to the embodiment shown in FIGS. 9, 10, and 13, an optional hinge 31 prevents the cover from detaching completely from the rigid interface member 22. A hinge can also be used independent of a clasp means. The  
30 hinge assembly 31 can advantageously be used with other mechanical closing devices, such as a two-position rocker-and-spring assembly, wherein, when the cover is below a center

position, the cover is urged shut by the spring, and when lifted above the rocker point, the cover is urged open by the spring.

FIG. 16 shows an alternative embodiment wherein the cover 29 releasably engages the rigid interface member in a threadable engagement. Mutually engageable upper threads 34 and lower threads 35 are respectively formed around the edges of the cover 29 and the rigid interface member 22.

As seen in FIGS. 14 and 16, a storage cavity 30 within the rigid interface member 22 can be used to store personal items, such as lip gloss 41 or other forms of make-up 82, prescription medications 83, a condom, or other small personal items. Consumable personal items such as lip gloss will preferably be stored in a pre-formed container that can be removed and replaced within the storage cavity 30. FIG. 16 shows an alternative embodiment including modular inserts 43 which can be used to segregate storage of separate items, such as different shades of lip gloss or make-up, different prescription medications, etc.

FIG. 5 illustrates an embodiment comprising a timepiece 44 disposed within the storage cavity 30, and a watch stem 27 extending out of the side of the rigid interface member 22. Alternative electrical and mechanical devices such as battery operated timepieces, cameras, or cellular telephones stored within the cavity 30 are envisioned within the scope of the claimed invention. Those skilled in the art will understand that insertion ports for batteries, digital memory, cell-phone ear plugs, and other electro-mechanical accessories can be positioned in a variety of places, such as in the bottom surface 24, the side of the rigid interface member 22, or in the storage cavity 30 as accessed after opening the cover 29. Watches and other electronic and mechanical devices are preferably removable for battery replacement, servicing, or exchanging with other insertable devices and members.

The upper surface of the rigid interface member, seen in FIG. 1, 9 and 19 will preferably be a decorative member. Expensive embodiments can include onyx, lapis lazuli, or other precious or semi-precious stones, as well as porcelain, ceramic, gold, platinum and silver etchings, and other jeweled and decorative surfaces. The decorative surfaces can

include various artistic displays, emblems of college and professional sports teams, casinos, restaurants, inaugurations, sports championships and other commemorative events.

5 A neck 38 extending horizontally from the rigid interface member 22 is discussed in greater detail in conjunction with the rigid arm 45. The neck can be integrally formed with the rigid interface member, or securely attached thereto. The axis of the neck is preferably parallel to the planar interface area 23.

### **The Rigid Arm**

10 The neck 38 couples a rigid arm 45 to the rigid interface member 22.

Referring primarily to FIGS. 2, 5-12 and 14-16, the rigid arm 45 is formed from a rigid material or combination of materials that are strong enough to maintain a preformed shape while supporting the weight of a purse. Materials can include, but not limited to metal, graphite, composite and kevlar compositions or combinations. The rigid arm preferably includes a horizontal extension 50 and a vertical extension 51. Embodiments are envisioned wherein the rigid arm is single piece construction, such as a contiguous wire rod. Alternative embodiments discussed in greater detail below envision a rigid arm having multiple separate members joined by a linking piece, such as a turnbuckle.

20

The proximal end 46 of the rigid arm is located at the tip of the horizontal extension 50, and couples with the neck 38 of the rigid interface member 22. When the rigid arm is coupled with the neck 38, the horizontal extension of the rigid arm is parallel to the planar interface area 23.

25

The distal end 55 of the rigid arm couples with the flexible member 60 through an upper flexible member coupling 61.

30 As discussed above, the engagement between the proximal end 46 of the rigid arm 45 and the neck 38 is preferably a swivelable engagement. FIG. 5 shows a basic swivel engagement that permanently couples the horizontal extension 50 to the neck 38.

FIG. 9 shows a swivel engagement including an inner neck portion 38a extending from the rigid interface member 22 and an outer neck portion 38b coupled with the horizontal extension 50. A release means shown as a ball-detent engagement allows the rigid interface member 22 to be detached from the rigid arm 45. A depressible ball 58 in the inner neck engages a detent opening 59 in the outer neck portion 38b to form a ball-detent engagement. The rigid interface member 22 can be released from the rigid arm 45 by depressing the ball 58 and withdrawing the inner neck 38a from the outer neck 38b.

FIG. 11 shows an alternative swivel embodiment with a release means comprising a threaded engagement between the horizontal extension 50 of the rigid arm 45 and the neck 38. The horizontal extension 50 includes a threaded portion 48 engaged with a threaded interior 42 of the neck 38. The threaded embodiment allows the horizontal extension 50 of the rigid arm 45 to swivel within the neck 38. Although threaded engagements can allow a rigid interface member 22 to be detached from the rigid arm 45, alternative embodiments are envisioned wherein a stop, such as a thread interruption, prevents the complete unscrewing and detachment of the rigid arm from the rigid interface member.

FIG. 15 is an alternative swivelable embodiment having an enlargement shown as a rounded boss 47 formed on the proximal end of the rigid arm, and secured within the neck by a constriction shown as a choke flange 37 within the neck 38.

The specific embodiments of swivelable and releasable engagements of the rigid arm 45 and the rigid interface member 22, as described above, however, are exemplary, and are not intended to limit other swivel engagements that are fully intended within the scope of the claims, including detachable and non-detachable swivel engagements. Additionally, non-swivelable embodiments are envisioned wherein the rigid arm 45 is engaged to the neck 38 in a non-swiveling relationship.

As shown in FIGS. 1, 2, 5, 12, 14 and 16, rigid arm embodiments 45 can include a vertical extension 51 perpendicular to the horizontal extension 50. A lengthening means on

the vertical extension 51, shown as a turnbuckle 49, allows adjustment of the vertical distance between the planar interface area 23 and the distal end 55 of the rigid arm 45. A vertical lengthening means allows the purse hanger 20 to be adjusted according to the thickness of the table, bar, or other horizontal surface from which a purse may be hung. By positioning the  
5 lengthening means on a vertical extension 51, the act of lengthening or shortening the vertical extension will not move the distal end 55 out of the center axis.

FIGS. 7 and 8 show an enlarged view of a lengthening means in the form of a threaded turnbuckle 49 coupling an upper member 56 and a lower member 57 of the vertical extension.  
10 According to one embodiment, the turnbuckle can be completely unscrewed from at least one of the upper and lower members 56, 57, thereby allowing the user to combine a different flexible member 60 with the purse hanger assembly. An alternative embodiment, however, envisions stops such as enlarged unthreaded portions on the upper and lower members 56, 57 that prevent detachment of the upper and lower members from the turnbuckle.

15

FIG. 19 illustrates alternative embodiment with a rigid arm 45 defined by a large progressive curve. The shape of the rigid arms in the figures are exemplary, and other alternative shapes are envisioned. The rigid arm can be formed from multiple members, such as two rods and a turnbuckle as shown in FIG. 16, or from single piece construction as shown  
20 in FIG. 19.

### The Stable Region

As best seen in FIGS. 12, 13 and 18, the stable region 69 is the region vertically beneath the planar interface area 23. When a purse 80 is suspended by a purse hanger 20 supported by a flat surface 21, and the distal end 55 of the rigid arm 45 is within the stable  
25 region, the sum of the moments acting on the rigid interface member will be zero, allowing a purse hanger to remain in a stable orientation. In swivel embodiments, the rigid arm will be urged by gravity to pivot until the distal end 55 passes into the stable region. In non-swiveling embodiments, the distal end will be fixedly disposed within the stable region.

30



As noted above, the planar interface area 23 depends on the shape and arrangement of the member or members in physical contact with the tabletop. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom  
5 surface of a felt, rubber or cork pad 28 in contact with the tabletop 21. In the multi-leg embodiment 25 of FIG. 18, the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87.

As best seen in FIG. 12, the stable region 69 vertically beneath the planar interface  
10 area 23 is largest when the planar interface area is horizontal. When the rigid interface member is swiveled to a non-horizontal orientation, the stable region 69 collapses in size.

The weight of a purse will naturally cause some flexure of a rigid arm, and can alter the horizontal position of the distal end 55. If bending or flexure were to move the distal end  
15 out of the stable region 69 during use, the purse hanger would become unstable. FIGS. 1, 2 and 19 show a purse hanger 20 designed, when a purse of a predetermined weight is supported by the purse hanger, the distal end 55 is aligned along the center axis 68 that intersects the geometric center 67 of the planar interface area 23 at right angles. According to this design, minor flexure of the rigid arm or minor manufacturing variations will not move  
20 the distal end 55 outside of the stable region 69 or otherwise degrade the stability or usefulness of the purse hanger. In swiveling embodiments, the arc defined by the distal end 55 will pass through the center axis 68. In non-swiveling embodiments, the distal end 55 of the rigid arm should be fixedly disposed in vertical alignment beneath the planar interface area 23 when the planar interface area is horizontal.

25

### **The Flexible Member**

As best shown in FIGS. 1-5 and 16, a flexible member 60 has a first end with an upper flexible member coupling 61 for coupling with the distal end 55 of rigid arm 45, and a second end with a lower flexible member coupling 62 for coupling with the purse engagement loop  
30 70. The flexible member can be formed from any material or combination of materials that is sufficiently flexible to allow the purse hanger 20 to be stored in a purse 80 without detaching

the purse engagement loop 70 from the purse strap, and strong enough to reliably hold a purse in a suspended position. The opening in the purse can be substantially closed with the flexible member protruding through a small opening. Because part of the flexible member will remain outside the purse, the user can easily pull the remainder of the purse hanger out of the purse for use. According to a preferred embodiment, the flexible member will be between one inch and four inches in length. The appended claims, however, comprehend embodiments having a flexible member less than one inch or greater than four inches.

When a purse 80 hangs from a purse hanger as in FIG. 1, an impact against the purse 80, such as might be imparted from a knee or chair, can impart a torque to the purse which can be transmitted to the interface member 22, dislodging it from the tabletop 21. Such torque, however, can be dissipated by allowing the purse to spin when impacted by a knee or chair. The flexible member 60, therefore, should include at least one swivel member. FIG. 5 shows a purse hanger with a swivel engagement in the upper flex coupling 61, and a flexible member 60 in the form of a swivel ball chain. FIG. 2 shows a purse hanger with swivel engagements for the upper flex coupling 61 and the lower flexible coupling 62, as well as a swivel ball chain for the flexible member. FIG. 6 is an enlarged view of a swivel ball chain that can detachably connect to the upper flexible member coupling 61.

FIG. 16 and cross sectional view 16A show a non swiveling flexible member 60 comprising a flexible high strength tensile core 65 surrounded by decorative external layering, shown as gold braid 64. High strength tensile members can include, but are not limited to, steel or other wire rope, nylon, spun glass, carbon kevlar, as well as composites that are not yet developed. External decorative layering can include, but is not limited to, gold, silver or platinum chain or braid, as well as other jewelry. FIG. 17 shows pearls 66 strung on a high tensile strength core 65. Because a high tensile strength core such as steel rope will impart torque when twisted, and will not release the torque through swiveling, embodiments comprising a non-swiveling flexible member such as FIGS. 16 and 17 comprise non-swivelable flexible members 60 connected with swivelable upper flexible member coupling 61 and lower flexible member coupling 62.

### **The Purse Engagement Loop**

FIGS. 1-4 show a purse engagement loop 70 for holding the handle, or handles 81 of a purse 80. Referring to FIGS. 2 and 5, a purse engagement loop 70 is a rigid member having a primary loop member 71 and a movable loop member in the form of a hinged member 72 that is hingably secured to the primary loop member. The hinged member 72 can move between first and second positions relative to the primary loop member. A spring member urges the movable loop to the first position. When the movable loop member is moved from the first position to the second position relative to the primary loop member, the loop 70 is an open loop, and one or both purse straps 81, can be inserted through the opening and placed into the loop. When the hinged member 72 is restored to the first position, the loop 70 becomes a closed loop, securely holding the purse strap(s) inside the loop.

According to the embodiment of FIG. 2, the movable loop member 72 is attached to the primary loop member 71 by a hinge 74, and moves between the first and second positions in a swivel motion. A spring 73 exerts a force between the primary loop member and the hinged member 72 to urge the hinged member to swivel to the closed position.

The embodiment of FIG. 5 shows a primary loop member having a tubular construction 76, and a movable loop member in the form of a slidable member 75 that can slidably retract into the tubular construction. A helical spring 78 is positioned within the tubular construction to urge the slidable member 75 into a closed position. A finger tab 77 on the slidable member provides a means for a user to retract the slidable member.

An alternative embodiment for purse engagement loop 70, seen in FIG. 1, comprises a continuous loop without any movable member. During fabrication of a purse, a purse handle 81, or multiple handles, as in FIG. 1 are inserted through the continuous rigid loop 70. The purse handle is then fixed to the purse 80 in a manner known in purse construction. The purse hanger 20 is thereby permanently or semi-permanently affixed to the purse handle.

The present invention is directed to a purse hanger for hanging a purse from a table or other horizontal surfaces. The purse hanger has a flexible member allowing the rigid

interface member of the purse hanger to be stored in the purse without detaching the purse engagement member 70 from a purse strap. Many features that would be readily understood to one skilled in the art have not been discussed so as to not needlessly obscure important features of the claimed invention. At the same time, many specific details included herein are  
5 descriptive of particular embodiments, but are not essential to every embodiment comprehended by the appended claims. Accordingly, these details should not be construed to limit the scope of the claims appended hereto. It will be apparent to those skilled in the art that many modifications, alternatives and equivalent embodiments are possible without departing from the spirit and scope of the invention set forth in the appended claims.

10

## CLAIMS

### I Claim:

- 1 1. A purse hanger for hanging a purse from a flat surface comprising:
  - 2 a) a rigid interface member defining a planar interface area;
  - 3 b) a rigid arm with a proximal end coupled with the rigid interface member and a  
4 distal end;
  - 5 c) a flexible member with a first end coupled to the distal end of the rigid arm,  
6 and a second end coupled to a purse engagement member.
- 1 2. The purse hanger according to claim 1 wherein the planar interface area is  
2 substantially co-planar with said flat surface, and wherein said distal end of said rigid  
3 arm is oriented vertically beneath said planar interface area.  
4
- 5 3. The purse hanger according to claim 1 further comprising a purse with a purse strap  
6 engaged with said purse engagement member.
- 1 4. The purse hanger according to claim 1 wherein the rigid arm is swivelably coupled  
2 with the rigid interface member.
- 1 5. The purse hanger according to claim 1 wherein the rigid arm is detachably coupled  
2 with the rigid interface member.
- 1 6. The purse hanger according to claim 1 wherein the rigid interface member has a  
2 storage cavity.
- 1 7. The purse hanger according to claim 6 further comprising storage members stored in  
2 said storage cavity, said storage members being selected from among a group  
3 consisting of lip gloss, foundation, make up, vitamins, drugs, a condom, modular  
4 inserts, a timepiece, a cellular telephone, a camera and combinations thereof.

- 1 8. The purse hanger according to claim 6 further comprising a cover for covering said  
2 storage cavity, and securement means for securing said cover to said rigid interface  
3 member.
- 1 9. The purse hanger according to claim 8 wherein said securement means is selected  
2 from among a group consisting of snaps, clasps, hooks, hinges, magnets, threaded  
3 members, and combinations thereof.
- 1 10. The purse hanger according to claim 1 wherein said rigid arm comprises a horizontal  
2 extension parallel with said planar interface area.
- 1 11. The purse hanger according to claim 10 wherein the rigid arm comprises a vertical  
2 extension that is about perpendicular to said horizontal extension.
- 1 12. The purse hanger according to claim 11 wherein the vertical extension has a  
2 lengthening means for altering a length of the vertical extension.
- 1 13. The purse hanger according to claim 1 wherein the first end of the flexible member is  
2 coupled to the distal end of the rigid arm by a swivel joint.
- 1 14. The purse hanger according to claim 1 wherein the second end of the flexible member  
2 is coupled to the purse engagement member by a swivel joint.
- 1 15. The purse hanger according to claim 1 wherein the purse engagement member is a  
2 rigid loop.
- 1 16. The purse hanger according to claim 15 wherein the rigid loop is a single continuous  
2 loop.
- 1 17. The purse hanger according to claim 15 wherein the rigid loop is a formed from a  
2 movable loop member movably engaged to a primary loop member, wherein, when

- 1 the movable loop member is in a first position, the rigid loop is a closed loop, and  
2 when the movable loop member is in a second position, the rigid loop is an open loop.
- 1 18. The purse hanger according to claim 17 wherein the movable loop member is movably  
2 engaged to the primary loop member through a pivot means.
- 1 19. The purse hanger according to claim 17 wherein the movable loop member is slidably  
2 engaged to the primary loop member through a slide means.
- 1 20. The purse hanger according to claim 19 wherein said slide means includes a tubular  
2 member into which the movable loop member can retract.
- 1 21. The purse hanger according to claim 17 further comprising a spring member for  
2 urging said movable loop member toward said first position.
- 1 22. A purse hanger for hanging a purse from a horizontal surface comprising:  
2 a) a rigid interface member with a planar interface area resting on said horizontal  
3 surface;  
4 b) a rigid arm with a proximal end coupled to said interface member and a distal  
5 end disposed vertically beneath said planar interface area;  
6 c) a flexible member with first and second ends, said first end of said flexible  
7 member secured to said distal end of said rigid arm;  
8 d) a purse engagement member coupled with said second end of said flexible  
9 member.
- 1 23. The purse hanger of claim 22 wherein the flexible member is at least one inch long.
- 1 24. The purse hanger of claim 22 wherein said purse engagement member is a rigid loop.
- 1 25. The purse hanger of claim 24 wherein the rigid loop comprises a primary loop  
2 member coupled to a movable loop member, said movable loop member being

1       movable between first and second positions, wherein, in said first position, said rigid  
2       loop is a closed loop, and in said second position, said rigid loop is an open loop.

1    26.   The purse hanger of claim 25 further comprising a spring member engaged with said  
2       primary loop member and with said movable loop member to urge said movable loop  
3       member to said first position.

1    27.   The purse hanger according to claim 22 wherein said rigid arm has a lengthening  
2       means.

1    28.   The purse hanger according to claim 27 wherein said lengthening means comprises a  
2       turnbuckle.

1    29.   The purse hanger according to claim 22 further comprising a storage cavity within said  
2       rigid interface member.

1    30.   The purse hanger according to claim 29 further comprising a cover for covering said  
2       storage cavity, and a cover engagement means for engaging said cover to said rigid  
3       interface member.

1    31.   The purse hanger of claim 30 wherein the cover engagement means is selected from  
2       among a group consisting of hinges, clasps, threaded members, chains, clips, and  
3       combinations thereof.

1    32.   The purse hanger according to claim 29 further comprising storage members stored  
2       within said storage cavity, said storage members selected from among a group  
3       consisting of lip gloss, foundation, modular dividers, vitamins, prescription  
4       medication, a condom, a cell phone, a time piece, a camera, and combinations thereof.

1    33.   A method for storing a purse hanger having a rigid arm with a proximal end extending  
2       from a rigid interface member and a distal end secured to a first end of a flexible



3 member, a second end of said flexible member having a purse engagement member  
4 secured to a strap of a purse, the method comprising the steps:  
5 a) opening the purse;  
6 b) flexing said flexible member; and,  
7 c) placing said rigid interface member within said purse, wherein said purse engagement  
8 member remains secured to said purse strap.

1 34. The method of claim 33 further comprising the step of substantially closing said purse,  
2 wherein said flexible member protrudes through a small opening in said purse.

## ABSTRACT OF THE DISCLOSURE

A purse hanger for hanging a purse from a flat surface has a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface during use.

- 5 A rigid arm has a proximal end swivelably coupled with the rigid interface member and a distal end, which, in use, is oriented by gravity to a position vertically beneath the planar interface area. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member such as a rigid loop securing the purse strap. The flexible member allows the rigid interface member to be stored in the purse
- 10 while the purse engagement member remains secured to the purse strap. The rigid interface member can have a storage cavity for storing personal items.

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

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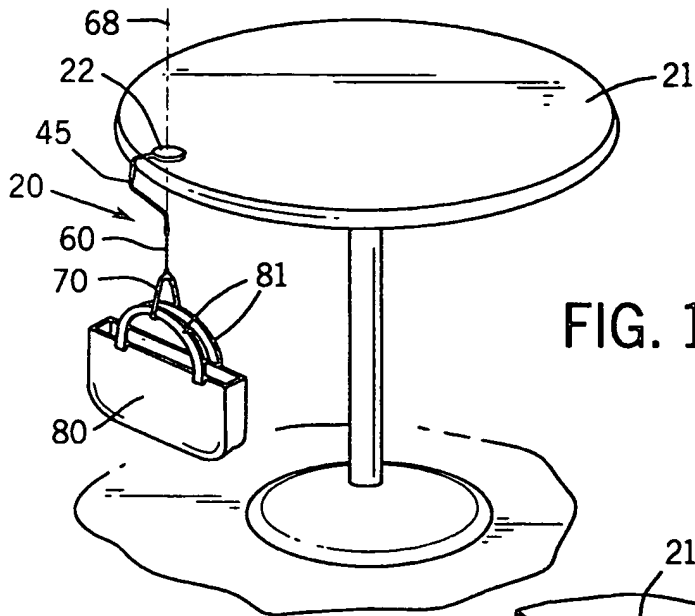


FIG. 1

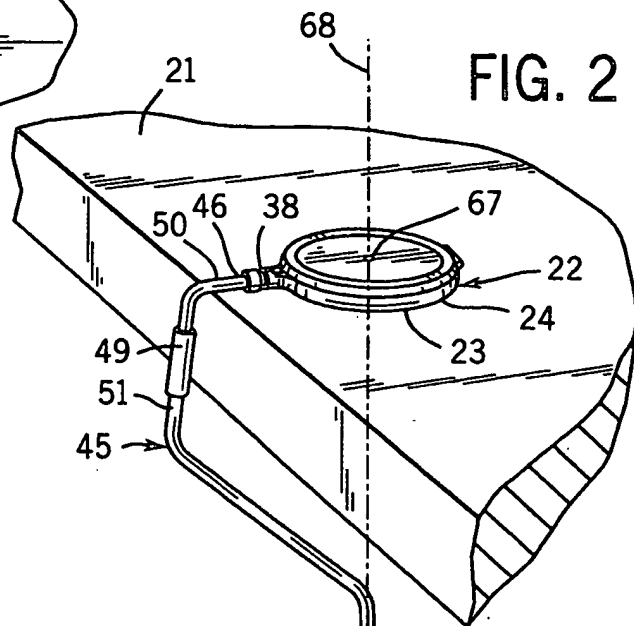


FIG. 2

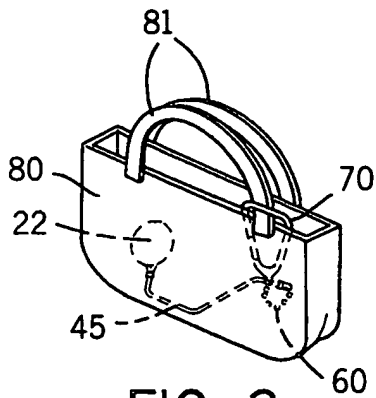


FIG. 3

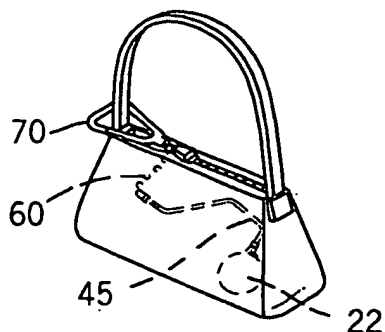
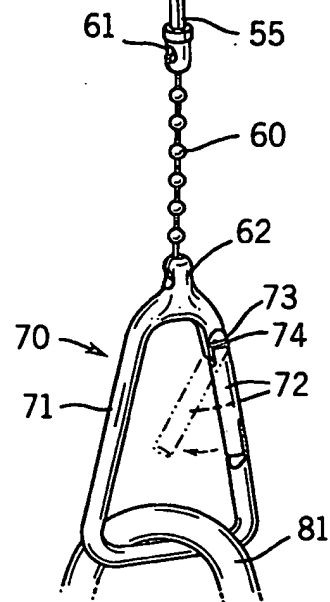
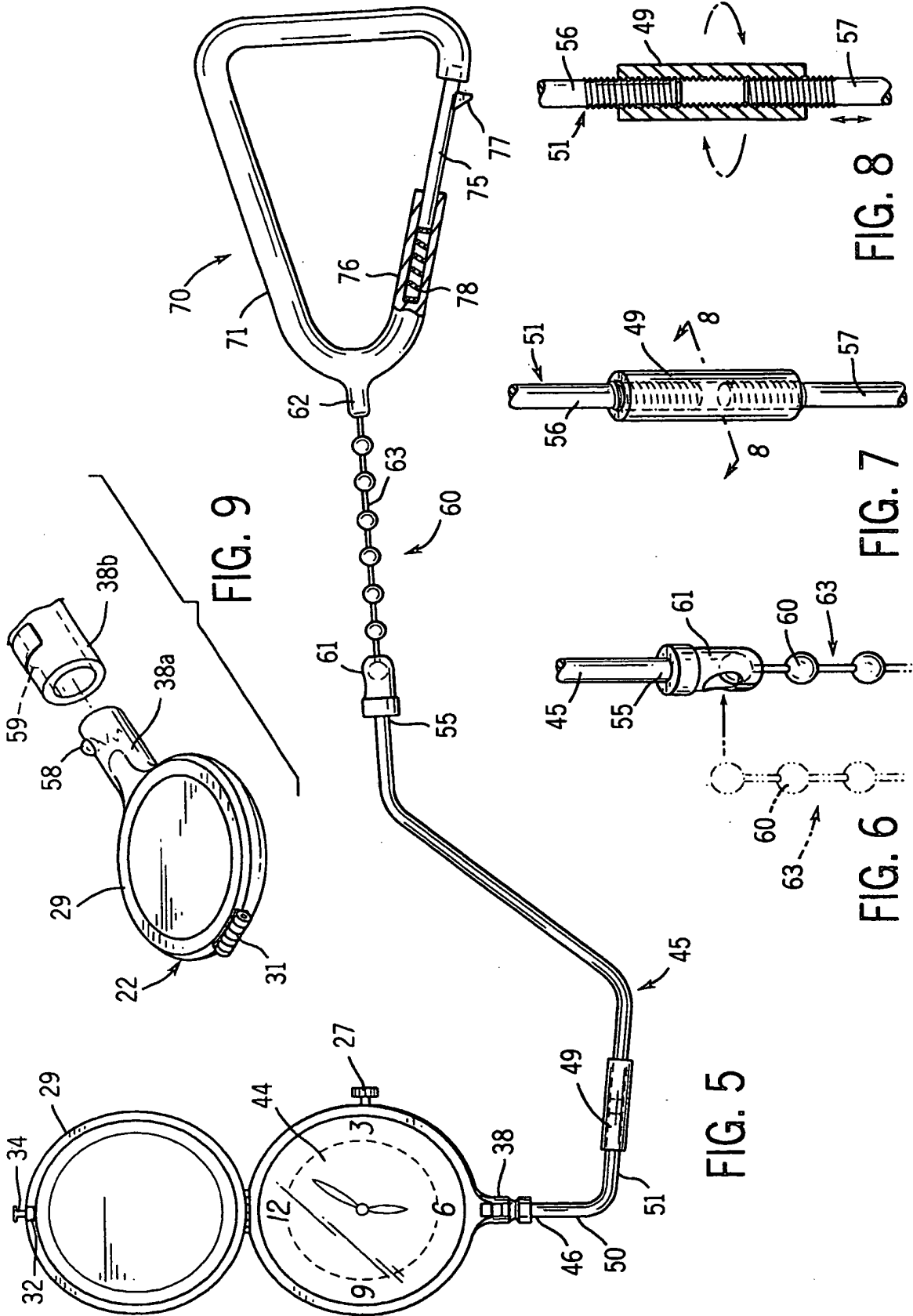


FIG. 4



PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

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PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

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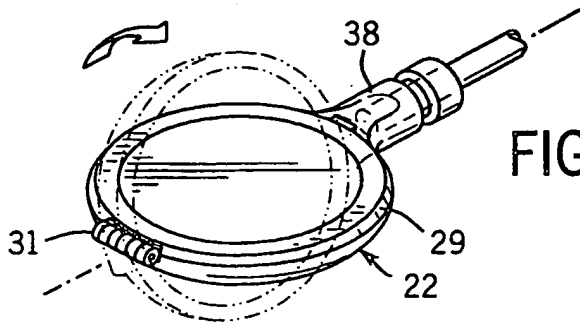


FIG. 10

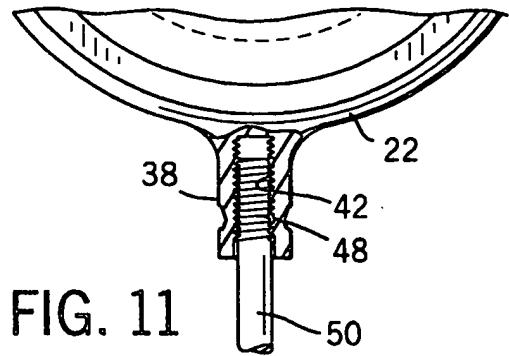


FIG. 11

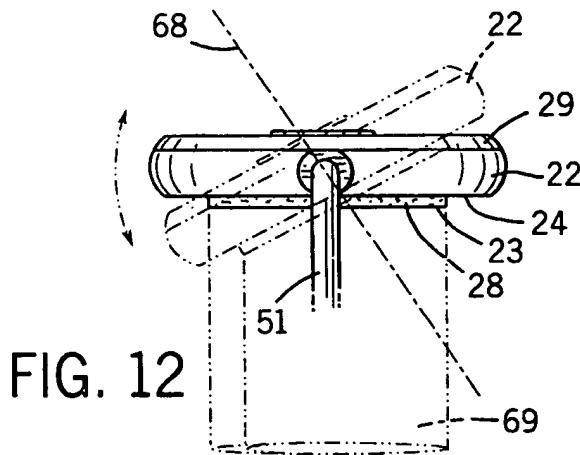


FIG. 12

FIG. 13

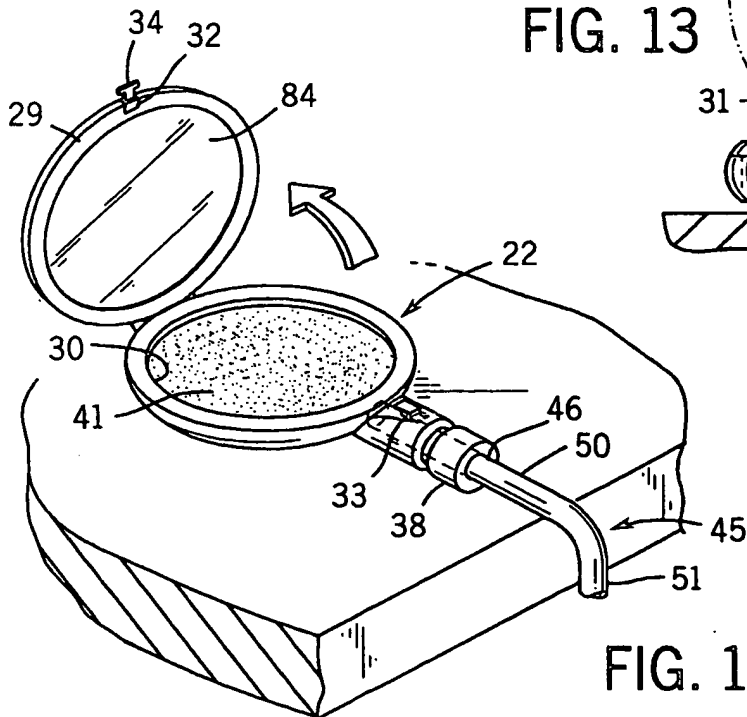
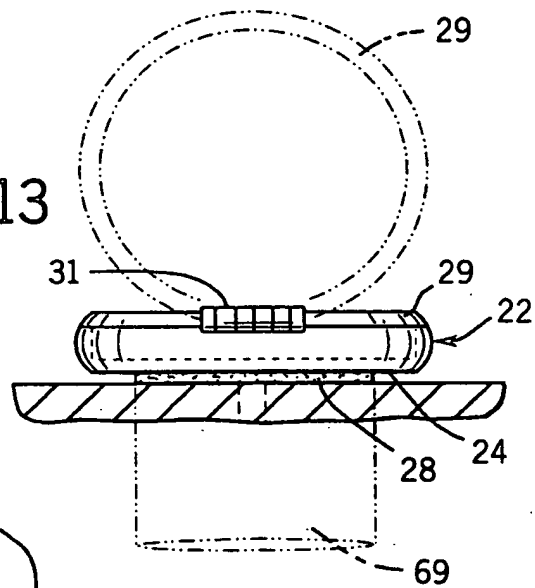


FIG. 14

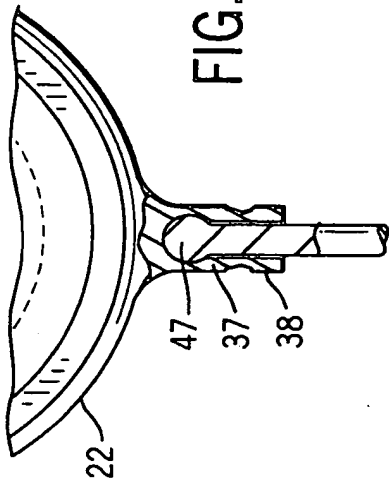


FIG. 15

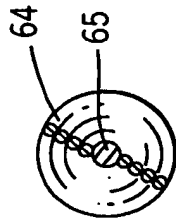


FIG. 16A

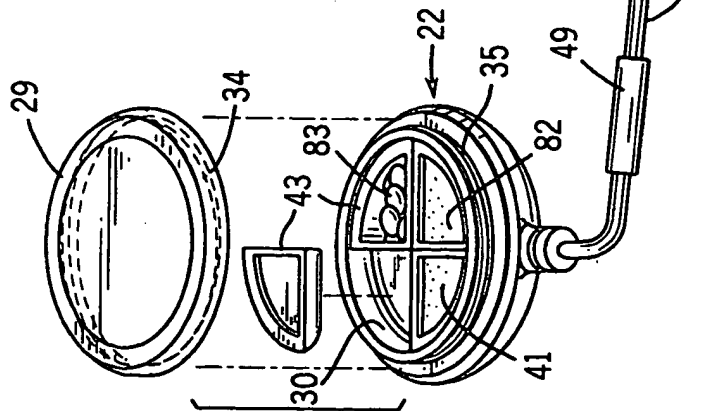


FIG. 16

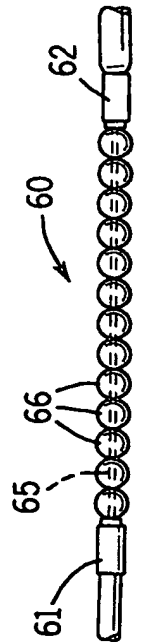
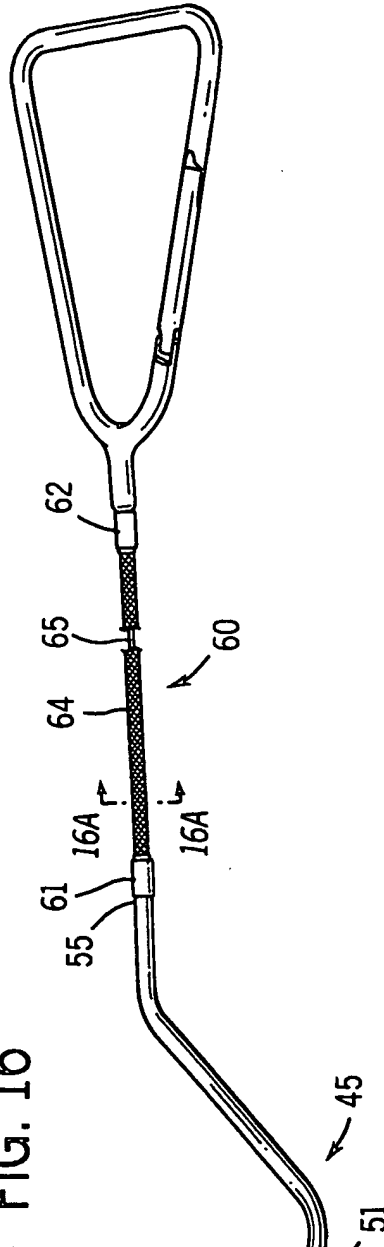


FIG. 17

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100  
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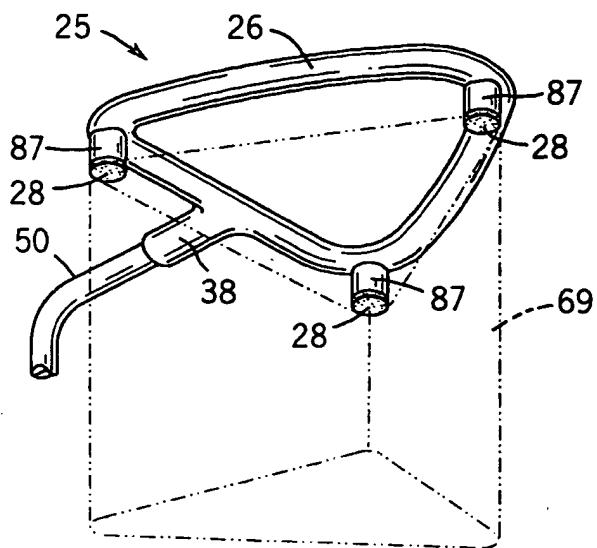


FIG. 18

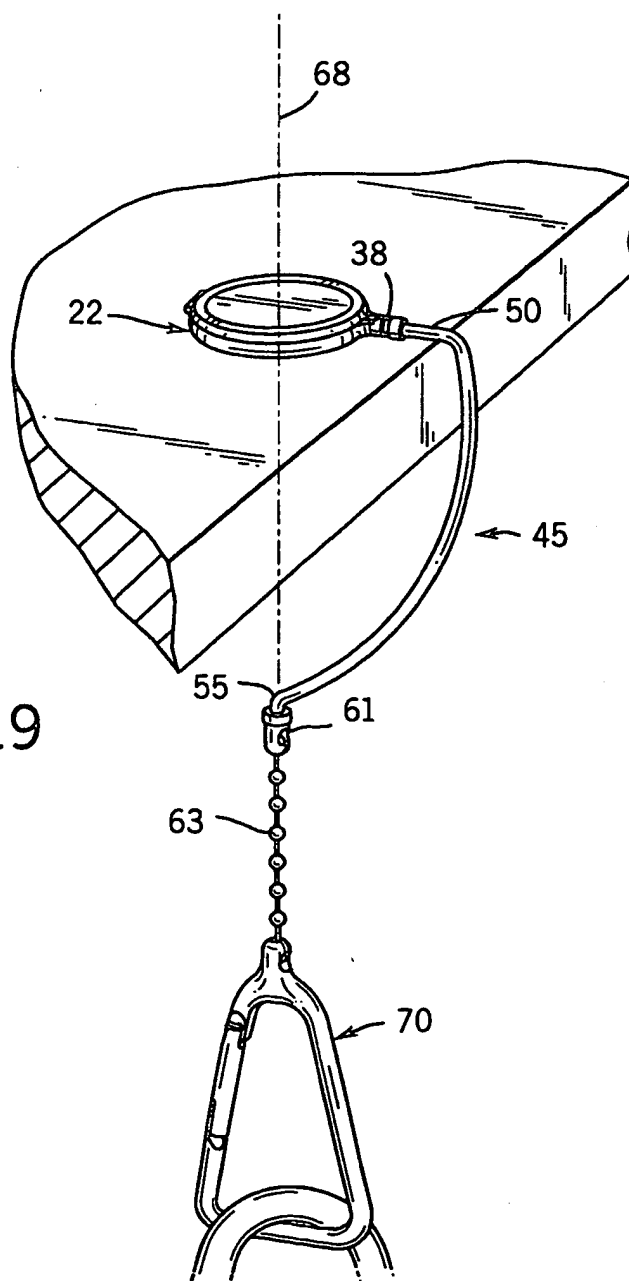


FIG. 19



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,426	01/23/2004	Shelly Lenna Bauerly	Bauerly 00100	6800
66842	7590	01/10/2008		
Law Office of Ronald Shea 2540 Country Hills Rd Apt. 192 Brea, CA 92821			EXAMINER LE, TAN	
			ART UNIT 3632	PAPER NUMBER
			MAIL DATE 01/10/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,426		BAUERLY, SHELLY LENNA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tan Le		3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-32,35-39 and 41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9,19,20,29-32,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28,37-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's reply filed 10/11/07 is acknowledged. Claims 1-2, 4-32, 35-39 and 41 are currently pending. Claims 3, 33-34 and 40 had been canceled. Claims 5-9, 19-20, 29-32 and 35-36 had been withdrawn.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25, 37-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1 and 22, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising a rigid interface member defining a planar interface area (12); a rigid arm with a proximal segment terminating at proximal end 19, a distal segment 20, 21, 22, 23, 15) terminating at distal end 21, 22, 23, 15, a centrally extension ( a bend or curve between 13 and 20) disposed between proximal segment and a distal segment. wherein the proximal end is coupled with the rigid interface member, the proximal end being in a orientation substantially parallel to the planar interface area and curving into the central extension, and wherein the central extension curves into the distal segment which extends vertically downward (20) from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as

segment (21, 22, 23, 15 upon which a handbag, purse or the like can be supported or secured).

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end (at the v-shaped) of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop; and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

AS to claims 37-38, claims 37-38 recited limitations similar to claims 1 and 22, except that the central extension in this case is element 20.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

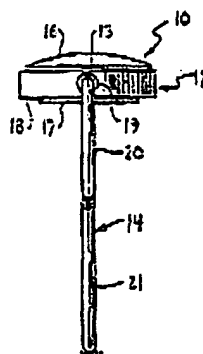
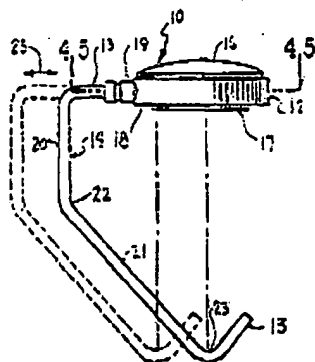
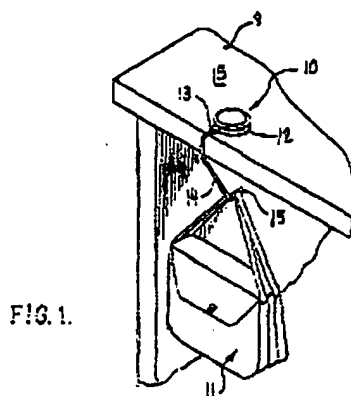
It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical

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extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

4/26



***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 10/11/07 have been fully considered but they are not persuasive.

The crux of the arguments are: "neither Lurie nor Omura disclose or suggest "the central extension curves downward to form the distal segment that extends vertically downward" and "neither Lurie or Omura disclose or suggest an apparatus wherein the distal ends is, or even can be positioned vertically beneath the planar interface area." (page 10) This is not deemed to be persuasive. As stated in the rejection above, Lurie teaches the central extension curve (between elements 13 and 20) and the distal segment 20 that extends vertically downward. Lurie also teaches the distal end 22, 21, 23, 25 and the distal end positioned vertically (at point 23) beneath the planar interface area.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran.

Applicant's argument appears to be attacking individual reference while the rejection is based on the combination. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.



In the instant case, Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. In addition, Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. The combination of Lurie and Omura and Sheeran would have suggest the subject matter of claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number:  
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Page 10


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. .


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818.

The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
AMY J. STERLING  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600

Tan le   
January 3, 2008.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,426	01/23/2004	Shelly Lenna Baucry	Baucry 00100	6800

66842	7590	09/28/2007
LAW OFFICES OF RONALD SHEA		
2450 COUNTRY HILLS RD , APT . 192		
BREA, CA 92821		

EXAMINER	
LE, TAN	

ART UNIT	PAPER NUMBER
3632	

MAIL DATE	DELIVERY MODE
09/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,426		BAUERLY, SHELLY LENNA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tan Le		3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-32 and 35-41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9, 19, 20, 29-32, 35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28 and 37-41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/07 and 7/28/07 have been entered.

Claims 1-2, 4-32, 35-41 are currently pending. Claims 3 and 33-34 have been canceled. Claims 5-9, 19-20, 29-32 and 35-36 were withdrawn.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1, 22, 37 and 40, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising the limitations as follows: a rigid interface member defining a planar interface area (12); a rigid arm (14, Fig. 1) with a centrally extension disposed between proximal end and a

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distal end (the central extension which has at least one bend in a direction different from the proximal end and in a direction different from proximal end), wherein the proximal end is coupled with the rigid interface member in a orientation substantially parallel to the planar interface area, and wherein the distal end extends downward from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as a hook segment (V-shaped) 23, 15 upon which a handbag, purse or the like can be supported or secured.

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

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As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop;

and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical

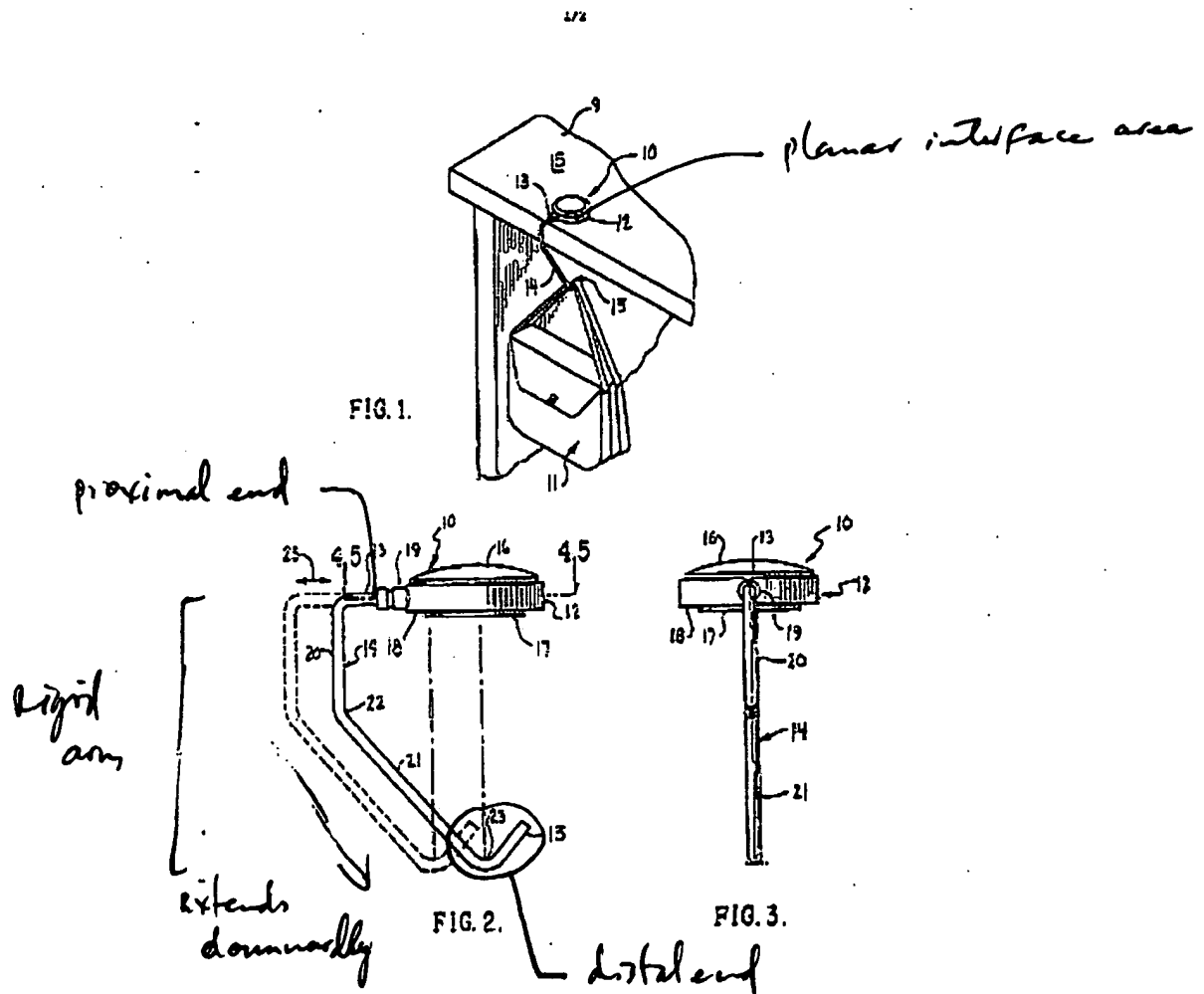


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extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

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***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 7/28/07 have been fully considered but they are not persuasive.

Regarding Applicant's argument that neither Lurie nor Omura disclose or suggest "a rigid arm with a proximal end coupled with the rigid interface member in an orientation substantially parallel to the planar interface area, and wherein the distal end extends' downward from the central extension when the distal end is' positioned vertically beneath the planar interface area." "The rigid arm of Lurie bends at an upward angle, and Omura does not disclose or suggest an embodiment wherein the rigid arm locates beneath the planar interface area. Therefore, even if Omura and Lurie could somehow be combined in a manner suggested by the Examiner", this is not found persuasive. As stated in the rejection, Lurie alone clearly teaches substantially all the limitations with the distal end extends downward from the central extension. The examiner considers the "V-shaped portion" (see attached figure) at the end of the rigid arm is the distal end, which considers positioned vertically said planar interface area, whereas the V-shaped distal end portion function as a hook or securement member.

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Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. Therefore, the rejection of these claims is still maintained.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran, Applicant's argument as indicated on page 12 of the Remarks appears to be not directed to what the rejection has been set forth. Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. It should be noted that there is no requirement for a secondary reference to meet every limitation of the claim before it can be utilized. It should also be noted one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In the instant case, the combination of Lurie and Omura and Sheeran would have suggest the subject matter of independent claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.


**Conclusion**

**THIS ACTION IS made NON FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818. The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Tan Le  
September 22, 2007.

  
Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600

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(33) US

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(51) INT CL<sup>6</sup>  
 A47B 97/00, A47G 25/08

(52) UK CL (Edition K)  
 A4L LAL L1002 L120 L305 L704

(56) Documents cited  
 GB 1290629 A

(58) Field of search  
 UK CL (Edition K) A4L LAH LAL LBBA  
 INT CL<sup>6</sup> A47B, A47G

(54) Hanger device

(57) A hanger device for supporting handbags, purses, umbrellas and the like from a table top or counter comprises a housing 12 to be supported upon a table top or counter. An elongated support shaft 13 is slidably disposed within the housing in parallel spaced relation to the table top or counter. The support shaft depends downwardly from the plane of the housing into a support arm 14, the support arm being deflected into a hook 15. The upper edge of the hook is disposed beneath the housing at a position determined by the slidable relationship between the support shaft and the housing.

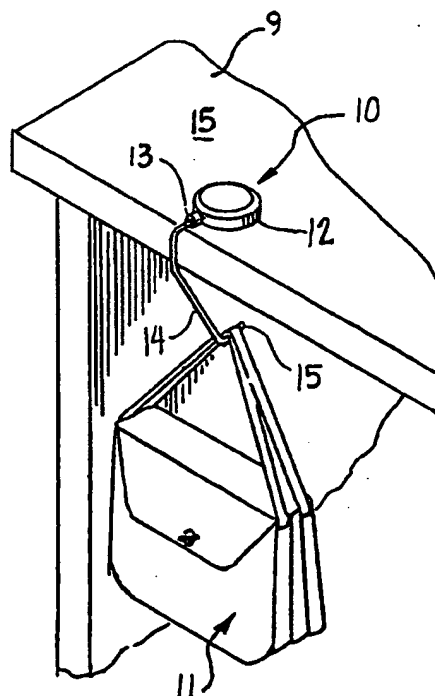


FIG. 1.

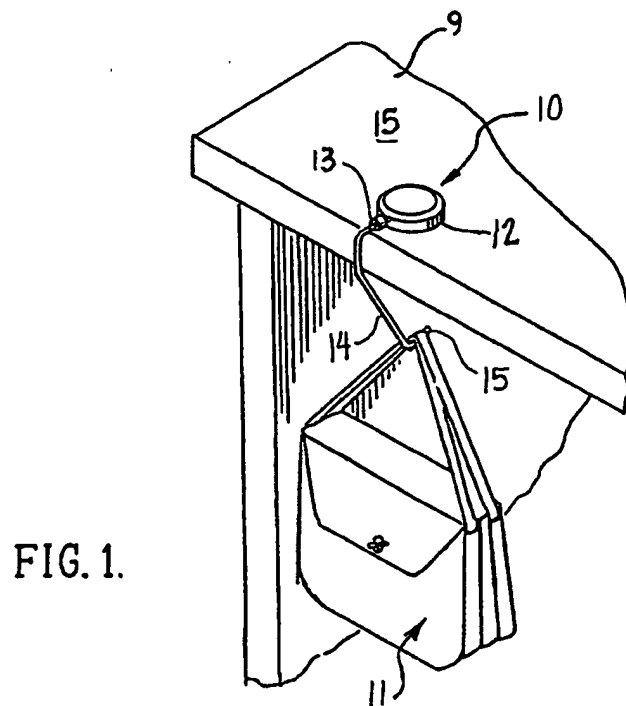


FIG. 1.

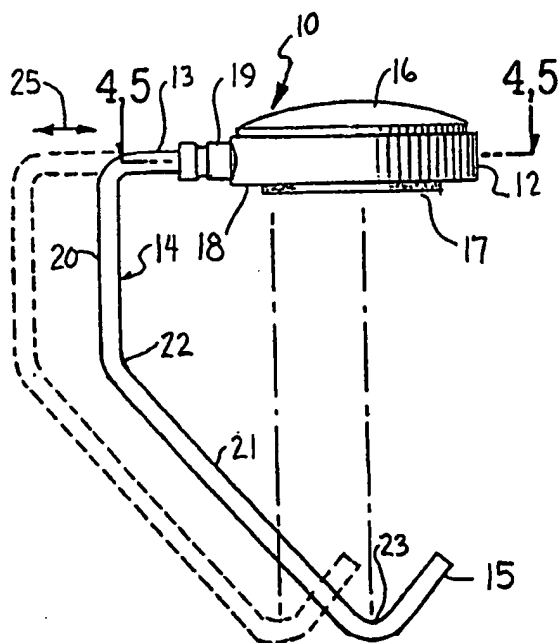


FIG. 2.

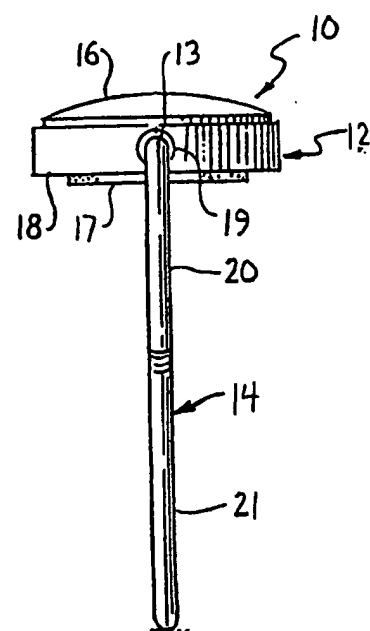


FIG. 3.

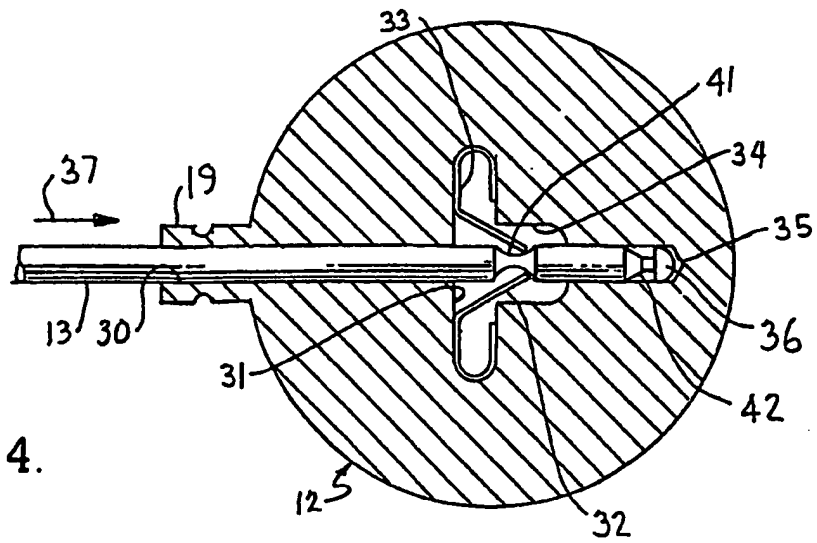


FIG. 4.

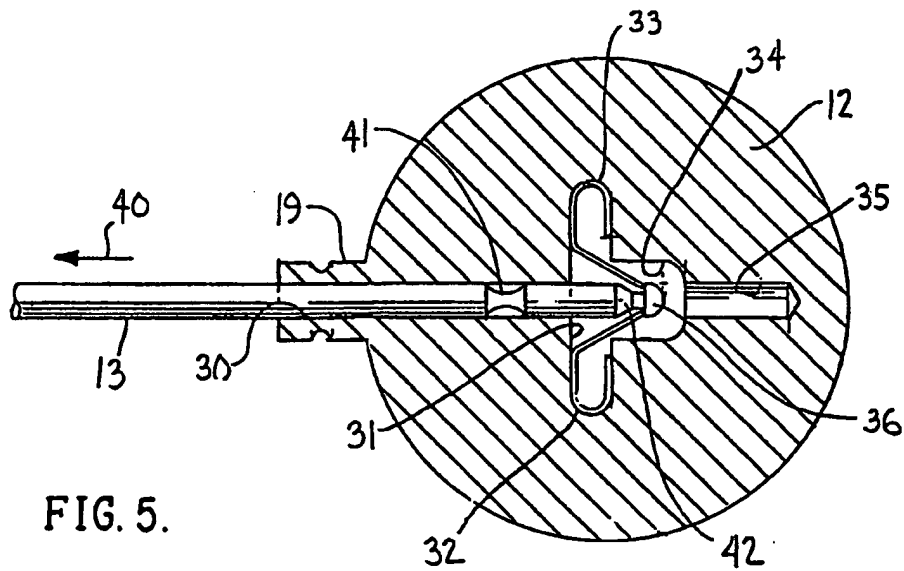


FIG. 5.

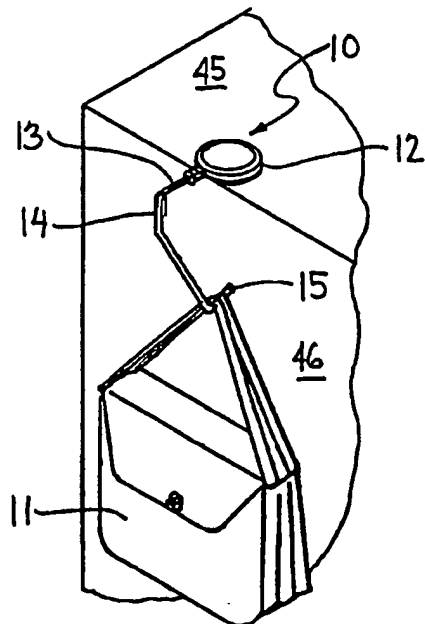


FIG. 6.



- 1 -

HANGER DEVICE

The present invention generally relates to supporting devices and more particularly to devices for use in hanging handbags, umbrellas and the like from tables and counter tops.

There has long been a problem experienced by persons who are carry handbags, umbrellas or other small parcels when dining, attending meetings or at other occasions where it is necessary to maintain possession of the item. The most apparent problem arises when men or women are dining in restaurants and are required by prudence to maintain purses or handbags in close proximity while dining. By necessity, the individual must usually place the handbag, purse or parcel on his or her lap, on a separate chair, on the table or on the floor. When the lack of space prevents convenient placement of the parcel, an individual is often forced to place the object on the floor thereby putting it in contact with dirt and subjecting it to theft.

A number of devices are taught by the prior art which seek to solve the problem addressed by the present invention. Examples of these devices are disclosed in United States Patent Nos. 4,194,714, 2,532,255 and 2,473,086. All of the devices taught by the prior art exhibit a similar problem which

is resolved by the present invention. The device taught in the '714 patent comprises a hanger for a purse having an elongated first arm, one end thereof to be placed on a table top, a second arm being hinged at an end of the first arm and being adapted to support the purse thereon. There is a fixed relationship between the arm which is supported by the table and the location which the purse, bag or parcel is supported. In the '255 patent, a substantially cylindrical housing is adapted for placement upon a table top or counter and includes a downwardly depending hook for support of the purse. Although the hook is provided with the ability to swing with respect to the housing, there is no ability to laterally displace the hook with respect to the supporting housing. The '086 patent comprises a structure which is substantially similar to that shown in the '255 patent. While providing the ability of the supporting hook to swing relative to a supporting plate, there is no ability to laterally displace the hook with reference to the supporting hook.

The devices taught by the prior art all exhibit an inherent problem which is resolved by the present invention. Irrespective of whether the supporting arm or hook can be swiveled or pivoted with respect to the supporting plate or housing, the inability to laterally displace the elements with reference to each other limits use of the devices to table tops or other surfaces having access beneath same. As an example, the

devices taught by the prior art cannot support a handbag or purse from a counter top which includes an adjacent, fixed vertical surface.

The present invention resolves those problems inherent in the designs in the devices taught by the prior art. A supporting housing is adapted to be placed upon the horizontal surface of a table top or counter. A supporting shaft horizontally extends from the housing and is in a slidable relationship therewith. The supporting shaft depends downwardly into a supporting arm and hook which is used to hold the handbag, purse or the like. By altering the position of the supporting shaft relative to the housing, the point upon which the handbag or purse is supported can be laterally displaced relative to the supporting housing. By fully displacing the supporting arm relative to the housing, the present invention provides the ability to hang a handbag, purse or the like from a counter or table top even where there is no spacial access beneath the counter or table top.

The present invention comprises a hanger device for hanging a handbag, purse or the like from a counter or table top. A cylindrical housing is adapted for secure placement upon the counter or table top. A supporting shaft is slidably disposed within the housing and extends therefrom in the plane of the housing. The supporting shaft is coupled within the housing to provide for a plurality of fixed positions. The supporting shaft

is slidably disposed within a positioning channel, the shaft including a predetermined number of selectable positions formed by tapered sections of reduced diameter along the supporting shaft. Resilient leaf springs are disposed on opposite sides of the supporting shaft within the housing. The springs are adapted to resiliently bear upon the shaft and secure supporting shaft at selected positions when in contact with the tapered sections. The portion of the supporting shaft extending from the housing depends downwardly into a supporting arm and hook from which a handbag, purse or the like can be hung. By slidably changing the position of the supporting shaft relative to the housing, the supporting hook can be laterally displaced relative to the housing.

It is therefore an object of the present invention to provide an improved hanger device for supporting handbags, purses and the like from a counter or table top.

It is another object of the present invention to provide a hanger device which can be used with counters or table tops having no special access beneath same.

It is still another object of the present invention to provide a hanger device for purposes, handbags and the like which can be easily stored.

It is still yet another object of the present invention to provide an improved hanger device which is simple and inexpensive to fabricate.

The novel features which are believed to be characteristic of the invention, both as to its organization and method of operation, together with further objectives and advantages thereof, will be better understood from the following description considered in connection with the accompanying drawing in which a presently preferred embodiment of the invention is illustrated by way of example. It is to be expressly understood, however, that the drawing is for the purpose of illustration and description only, and is not intended as a definition of the limits of the invention.

FIGURE 1 is a perspective view of the present invention hanger device being supported from a table top.

FIGURE 2 is a side elevation view of the present invention hanger device showing the alternative lateral positions of the supporting arm relative to the housing.

FIGURE 3 is a rear elevation view of the present invention shown in FIGURE 2.

FIGURE 4 is a partial cross-sectional view of the housing and supporting shaft taken through line 4-4 of FIGURE 2 illustrating a first position of the supporting shaft relative to the housing.

FIGURE 5 is a partial cross-sectional view of the present invention taken through line 5-5 of FIGURE 2 showing the supporting shaft in its second, extended position relative to the housing.

FIGURE 6 is a perspective view of the present invention hanger device being supported upon a surface having no spacial access there beneath.

An understanding of the present invention can be best gained by reference to FIGURE 1, the present invention hanger device being generally designated by the reference numeral 10. As shown in FIGURE 1, hanger device 10 is supporting a handbag 11. Hanger device 10 generally comprises a housing 12 from which extends a supporting shaft 13 which depends downwardly into a support arm 14. Support arm 14 is deflected upwardly into a hook 15 upon which handbag 11 is hung. As shown in FIGURE 1, housing 12 rests upon table top 15 with hook 15 supporting handbag 11 beneath table top 15. As will be explained, the present invention hanger device 10 provides for use thereof with tables or counters which do not provide for spacial access beneath the top surface thereof (FIGURE 6).

The structure of the present invention can be best understood by reference to FIGURE 2 and FIGURE 3. The present invention hanger device 10 comprises a cylindrical housing 12 having upper and lower planar surfaces. The interior coupling between support shaft 13 and housing 12, as shown in FIGURE 4 and FIGURE 5, is enclosed by cover 16 which is capable of having decorative indicia disposed thereon. The lower planar surface of housing 12 comprises a resilient pad 17 which can be fabricated from rubber or a polyurethane foam. Pad 17 is used to provide

traction and thereby maintain placement of housing 12 on table top 15. In addition, resilient pad 17 provides a protective layer to prevent defacing table top 15.

As shown in FIGURE 2, support shaft 13 extends outwardly from sleeve 19 in parallel spaced relation to the lower planar surface 18 of housing 12. Support shaft 13 depends downwardly forming support arm 14 which is in a planar relationship with support shaft 13 (FIGURE 3). Support arm 14 is comprised of segments 20, 21 and hook 15. Segment 20 of support arm 14 is perpendicular to support shaft 13. Support arm 14 is deflected at 22 separating segments 20 and 21 whereby segment 21 of support arm 14 is oriented beneath housing 12. Segment 21 of support arm 14 depends upwardly at 23 forming hook 15 upon which a handbag, purse or the like can be supported (FIGURE 1).

In order to meet the objectives of the present invention, support shaft 13 is coupled through sleeve 19 to housing 12 in a manner which provides for lateral movement thereof in the direction designated by reference numeral 25 (FIGURE 2). As shown in FIGURE 2, the range of movement represented by reference numeral 25 allows hook 15 to be laterally displaced and thereby change the center of gravity of a supported object relative to housing 12. The means to slidably structure couple support shaft 13 within housing 12 can be best understood by reference to FIGURE 4 and FIGURE 5. FIGURE 4 represents the orientation of support arm 14 as shown in solid lines in FIGURE 2. FIGURE 5 represents the orientation of support arm 14 as shown in phantom

lines in FIGURE 2. As shown in FIGURES 4 and 5, a central channel 30 is disposed through sleeve 19 and extends diametrically into the central core of housing 12. A perpendicular cross-bore 31 extends equally on either side of channel 30 and is adapted to receive biased leaf springs 32 and 33. Beyond cross-bore 31, channel 30 extends into expansion channel 34 which is adapted to accommodate the biasing ends of leaf springs 32 and 33. Finally, channel 30 is extended through housing 12 into channel extension bore 35 to accommodate the terminus 36 of support shaft 13 when moved to the position indicated by reference numeral 37.

Support shaft 13 is a cylindrical member, one end thereof depending downwardly to support arm 14, the opposite terminus 36 limiting the extended movement of support shaft 13 when moved in the direction indicated by reference numeral 40 (FIGURE 5). To meet objectives of the present invention, support shaft 13 can be moved in a range between two alternative positions designated by reference numeral 25 (FIGURE 2). The positional movement of support shaft 13 is defined by a pair of annular depressions 41 and 42 formed along support shaft 13 about the axis thereof. As stated, FIGURE 4 represents the position of support arm 14 as shown in solid line in FIGURE 2. In this position, the distal ends of leaf springs 32 and 33 are biased placing the distal ends thereof in forced contact with annular depression 41. FIGURE 5 illustrates the altered position of support arm 14 represented in FIGURE 2 in phantom lines. In this



position, the biased force imposed by the distal ends of leaf springs 32 and 33 place them in forced contact within annular depression 42. As stated, an objective of the present invention is to provide a hanger device 10 which can be easily stored. Based on the cylindrical profile of support shaft 13, support arm 14 can be rotated about the axis of support shaft 13 and relative to housing 12 as represented by the directional reference 43 (FIGURE 3). In this manner, when the present invention hanger device 10 is to be stored, support arm 14 can be rotated until it lies in the same plane as housing 12 thereby producing a substantially flat and easily storable structure.

Use of the present invention can be understood by reference to FIGURES 1 and 6. As stated, FIGURE 1 illustrates the support of a handbag beneath a table top 15 having spacial access there beneath. In this position, support arm 14 is in the closed position (FIGURE 4), hook 15 being substantially in alignment with housing 12. In FIGURE 6, hanger device 10 is supported upon a table top or counter 45 which has no spacial access beneath same as a result of an integral, vertical wall 46. Under these conditions, support shaft 13 and support arm 14 are urged in the direction designated by reference numeral 40. This displaces hook 15 relative to housing 12 in a manner which permits handbag 11 to be supported on hook 15 irrespective of the lack of spacial access beneath table top or counter 45.

CLAIMS:

1. A hanger device for hanging an object from a table top comprising:

(a) a housing having a substantially planar lower surface adapted to rest upon the table top and a central bore disposed therethrough in parallel spaced relation to the lower surface thereof, the axis of said central bore bisecting the housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of positional depressions disposed in the surface of said support shaft, one of said positional depressions being substantially adjacent the first end of said support shaft;

(c) biasing means for engaging said positional depressions in the surface of said support shaft coupled within the central bore of said housing and in biased contact with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

2. A hanger device as defined in Claim 1 wherein said housing is cylindrical, the central bore therethrough being aligned along the diameter of said housing.

3. A hanger device as defined in Claim 1 wherein said support arms depend from said support shaft in a perpendicular relationship thereto.

4. A hanger device as defined in Claim 1 wherein said support shaft has two positional depressions formed therein, each being disposed about the full circumference of said support shaft.

5. A hanger device as defined in Claim 1 wherein said biasing means comprises two leaf springs having a distal end adjacent with and in forced contact with said support shaft.

6. A hanger device as defined in Claim 1 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

7. A hanger device as defined in Claim 1 further including a rubber pad secured to the planar lower surface of said housing.

8. A hanger device for hanging an object from a table top comprising:

(a) a cylindrical housing having a substantially planar lower surface adapted to rest upon the table top and the central bore diametrically disposed therethrough in parallel spaced relation to the lower surface of said housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of spaced, positional depressions annularly disposed along the surface of said support shaft, one of said annular, positional depressions being substantially adjacent the first end of said support shaft, said support shaft being rotatable through 360° of arc about its own axis;

(c) biasing means for engaging said annular, positional depressions coupled within the central bore of said housing and in bias contacted with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being perpendicular thereto, said support arm being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

9. A hanger device as defined in Claim 8 wherein said support shaft has two annular, positional depressions formed therein.

10. A hanger device as defined in Claim 8 wherein said biasing means comprises two leaf springs, each having a biased distal end adjacent with and in forced contact with said support shaft.

11. A hanger device as defined in Claim 8 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

12. A hanger device substantially as hereinbefore described and with reference to the accompanying drawings.

DERWENT-ACC-NO: 1998-315550

DERWENT-WEEK: 199828

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TITLE: Hanger for e.g. handbag, umbrella - uses  
flexible chain  
for connecting cuff-like clip and suspended  
tool, such  
that suspended tool is rotatable from support  
board up to  
90 degrees

PATENT-ASSIGNEE: OMURA Y[OMURI]

PRIORITY-DATA: 1996JP-0305409 (October 14, 1996)

PATENT-FAMILY:

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003	A47G 029/00	

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APPL-DATE		
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October 14, 1996		

INT-CL (IPC): A47G029/00

ABSTRACTED-PUB-NO: JP 10113275A

BASIC-ABSTRACT:

The hanger has a bearing (2) provided at the lower surface of a support board  
(1). A suspended tool (3) is connected to the support board via a shaft (5).

The shaft limits the rotation range of the suspended tool up to 90 degrees. A  
cuff-like clip (8) for holding a load e.g. handbag is attached to the suspended  
tool via a flexible chain (6).

ADVANTAGE - Reduces impact on body by which load collides by hanging

load on  
clip via flexible chain.

CHOSEN-DRAWING: Dwg.1/6

TITLE-TERMS: HANGER HANDBAG UMBRELLA FLEXIBLE CHAIN CONNECT CUFF CLIP  
SUSPENSION TOOL SUSPENSION TOOL ROTATING SUPPORT BOARD UP  
DEGREE

DERWENT-CLASS: P27

SECONDARY-ACC-NO:

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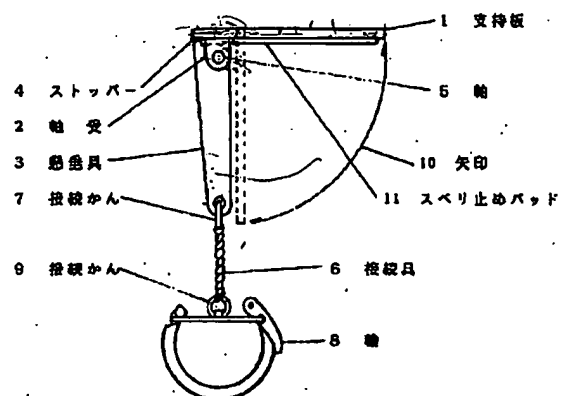
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(54) 【発明の名称】 ハンガー装置

(57) 【要約】

【課題】 テーブル又はカウンターの上面からハンドバッグなどを吊り下げるためのハンガー装置を提供する。

【解決手段】 支持板1と懸垂具3は折畳める様に接続し、柔軟性の有る細長い接続具6と容易に開閉、着脱出来る構造の輪8により、荷に取付けたまま携帯する。使用する時には、輪8により荷に取付けてあるハンガー装置の、定められた角度以上には開かない様に接続してある支持板1と懸垂具3により、テーブル又はカウンターの上面からハンドバッグなどの荷を吊り下げる。荷に取付けた輪8の位置が不適切なときには、これを取外して、簡単に変えることができる。





## 【特許請求の範囲】

【請求項 1】支持板1の下面に設けられた軸受2により、90°以上には開かないように、軸5で接続した懸垂具3の端部に、自在に回転したり曲がること出来る柔軟性の有る細長い接続具6により接続された輪8、を備えたハンガー装置。

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】この発明は、ハンガー装置に関するものであり、特に、テーブルやカウンターの上面から、ハンドバッグや傘等の荷を掛けるための装置に関する。

## 【0002】

【従来の技術】ハンドバッグや傘等の荷を持って居る者が、食事や会合などで、テーブルを使用する時に、それらの荷を、膝、椅子の後ろ、テーブルの上、或は床に置いたりしているが、邪魔になったり、安全性に問題が生じるのは周知の事である。

【0003】本問題を解決するための各種装置が従来提供されているが何れも硬直的な構造を持っており、その携帯には必ずしも便利とはいえない。

## 【0004】

【発明が解決しようとする課題】本発明は、これらの欠点を除いて携帯に負担を感じない様にするものである

## 【0005】

【課題を解決するための手段】今その解決手段を図面を追いながら説明すれば、(イ)支持板1と懸垂具3を固定的な形状としないで、定められた角度以上には開かない様に接続し、(ロ)懸垂具3の端部から、柔軟性の有る細長い接続具6により接続された輪8を備える。

(ハ)接続具6により懸垂具3に接続された輪8は、容易に開閉、着脱出来る構造のもので、必要に応じ、ハンドバッグや傘等に取付けたまま、又は、取外して使用に供する構造を備えている。

## 【0006】

【発明の実施の形態】本発明は、以上のような形態であるから、これを使用するときは、支持板1と懸垂具3を折畳んだ状態で、輪8を使用してハンドバッグや傘等の荷に取付けて携帯する。ハンガー装置が必要なときは、折畳んである支持板1と懸垂具3がストッパー4が当たるまで開いてからテーブルや、カウンターの上面に支持板1を引っ掛けて、ハンドバッグや傘等の荷を吊り下げる。ハンドバッグや傘等の荷に取付けた輪8の位置が不適切なときには、これを取外して、改めて適切な所に変える。

【0007】尚、本発明の実施に当たって次の如きことが出来る。

(イ)支持板1は矩形的他に、円形、楕円形又は多角形など、十分な静止摩擦力が有れば良い。

(ロ)接続具6は柔軟性が有れば繊維製の紐でも、金属又は樹脂類の鎖でも良く、接続かん7及び接続かん9は使用しないで、直接に接続具6と懸垂具3及び輪8を接続してもよい。

(ハ)輪8は、必ずしも図1の様な形でなくても、着脱が容易で有れば、他の形状でも良いし、単に針金を2-3回巻いた様な物でも良い。

10 (ニ)ハンドバッグや傘等の荷の、ハンドルや紐に取付けて携帯するので、支持板1の上面に装飾的な図柄やインシヤル等を施せば本人の持物である事の確認に役立ち、アクセサリにもなる。また、企業などの宣伝用ロゴを入れて宣伝媒体とする事も出来る。

(ホ)スベリ止めパッド11を支持板1の下面に付ければ、静止抵抗を増幅できるので、より一層の安定性が増す。

## 【0008】

20 【発明の効果】テーブルや、カウンターの様に、脚部が卓端より引っ込んでいる場合図4でも、垂直な壁面の所図5でも何等の故障なく使用出来る。ハンドバッグや傘等の荷に体などが接触しても、荷は柔軟性の有る接続具6で吊り下げられて居るので支持板1に加わる衝撃力は減衰して安全に使用出来る。

## 【図面の簡単な説明】

【図1】本発明の立面図

【図2】本発明の平面図

【図3】本発明の側面図

30 【図4】脚部が卓端より引っ込んでいるテーブルの上面に置いた本発明の斜視図

【図5】壁面が垂直なカウンターなどの上面に置いた本発明の斜視図

【図6】ハンドバッグのハンドルに取付けて携帯する時の本発明の斜視図

## 【符号の説明】

1は支持板

2は軸受

3は懸垂具

4はストッパー

40 5は軸

6は接続具

7は接続かん

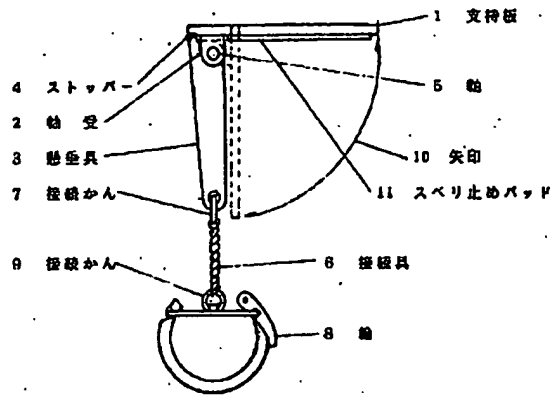
8は輪

9は接続かん

10は回転の範囲を示す矢印

11はスベリ止めパッド

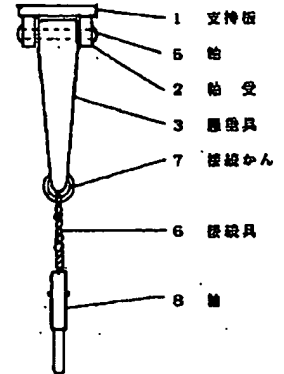
【図1】



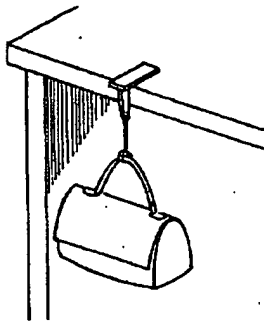
【図2】



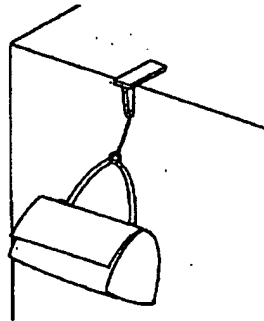
【図3】



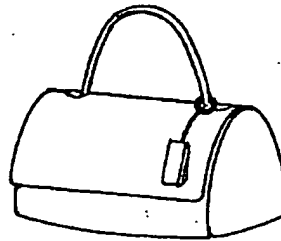
【図4】



【図5】



【図6】





IN THE UNITED STATES PATENT OFFICE

In Re Patent Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

Group Art Unit: 3632

Examiner: Le, Tan

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF TRANSLATION**

I, Kaoru Sugimura reside at 4283 Murietta Avenue #3 Sherman Oaks, CA 91423 in the county of Los Angeles. I prepared the attached translation of Japanese Patent 10-113275 to Omura, cited by the Examiner as prior art in the prosecution of the referenced Patent Application No. 10/763,426. I hereby affirm that the attached translation is a true and accurate translation, and that I am knowledgeable in the languages of Japanese and English.

I hereby acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the Application or any patent issuing thereon.

Respectfully submitted,

Date

3/12/06

Name

### **1<sup>st</sup> Page Summary (Abstract)**

A hanger device is offered to hang the handbag and the like from the surface of a table or the counter. Support board 1 and suspension member 3 can fold between the open and closed positions while a load is detachably secured within structural loop 8, which is secured to flexible splicer 6. The load such as handbags is hung from the upper surface of the table or the counter with support board 1 and suspension tool 3 connected so as not to open more than the provided angle of the suspender device installed in the load by loop 8 when using it. It is possible to shift position easily by detaching this when one of the loops 8 installed in the load is improper.

Reference Characters and corresponding Element names on First Page Drawing:

1. Support: backing
2. Bearing :ball, shaft
3. Iron bar
4. Stopper
5. A pivot
6. Connection tool, joining, link, connect, a junction ,conjunction
7. Connection link: ring, link, handle
8. Ring loop, hoop, ring, circle, wheel
9. Connection link
10. arrow
11. Stopper pad-a device to prevent slipping, skidding

(2)

Because of number 2 this system does not open more than 90 degrees

On the edge of number 3 there is a connection tool,6, which is flexible and connects with number 8.

001

This invention offered is a hanger system which makes it easy to hang handbags or umbrellas on table tops or counters.

002

People who have handbags or umbrellas when going to meetings or restaurants have to place the items on lap or chair. This is an obstacle. There is also a problem with safety.

003

Other similar inventions are not portable.

004

This eliminates the others and is portable

005

Now to explain with the pictures.

Number 1 and 3 can open but not more than 90 degrees. On the edge of number 3 there is a connection tool, 6, which connects with number 8. Number 8 is very easy to open and close. When necessary you can use with handbags or umbrella.

006

When you carry it, number 1 and 3 are closed and number 8 connects to handbag or umbrella. When in use, number 1 and 3 are open until stopper number 4 touches the table top or counter. You hang number 1 on the top of the table and if number 8 is unsuitable you can move it.

007

Number 1 support bar can be round or a polygon or an oval, any style. You just need enough stillness friction. Number 6 can be fabric or metal or a resin-treated chain. It is not necessary to have number 7 or number 9. You can connect number 6 and number 3 and number 8 directly. Number 8 can be different shapes if they are easy to open and close. It can be wire. If you decorate top of number 1 support bar with initials or design.

You can identify personal items or use as an accessory. You can decorate with company logo as a novelty or to advertise your company. If you put a stopper pad underneath the support bar it will be more stable.

008

If as in picture number 4, the table has open space, or in picture number 5, has a vertical wall, you can use without problem. If anything touches the handbag or umbrella, because of flexible chain number 6 holding them, the support bar will receive less shock.

Page (3) pictures

1. elevation
2. plane, level
3. side view
4. table with space
5. vertical counter
6. picture when you carry with a handbag



# Merriam- Webster's Collegiate<sup>®</sup> Dictionary

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**dis-sol-u-tion** \di-sə-'lū-shən/ *n* (14c) 1: the act or process of dissolving; as: a: separation into component parts b (1): DECAY, DISINTEGRATION (2): DEATH c: termination or destruction by breaking down, disrupting, or dispersing (the of the republic) d: the solving of an assembly or organization e: LIQUEFACTION 2: a dilute act or practice

**dis-solve** \di-'zolv, -zolv also -zav or -zov/ *v* [ME; fr. *L. dissolvere* *dis-* + *solvere* to loosen — more at SOLVE] *v* (14c) 1 a: to cause to disperse or disappear b: DESTROY c: to separate into components d: DISINTEGRATE e: to bring to an end f: to cause to pass into solution d: ANNUL (~ an injunction) 2 a: to cause to pass from emotion (sugar in water) b: MELT; LIQUEFY c: to cause to be emotionally moved d: to cause to fade out in a dissolve, 3 *archaic*: DECOMPOSE 4: to clear up (~ a problem) ~ *vi* 1 a: to become dissolved or decomposed b: BREAK UP; DISPERSE c: to fade away d: become fluid e: MELT b: to pass into solution c: to be overcome emotionally (dissolved into tears) d: to resolve itself as if by emotion (hate dissolved into fear) e: to change by a dissolve, (the ~s to a Victorian parlor) — **dis-sol-vable** \-zəl-və-bəl, -zōl-/ *adj*

**dis-sol-vent** \-zəl-vənt, -zōl-/ *n* or *adj* — **dis-sol-ver** *n*

**dissolve** *n* (1916) : a gradual superimposing of one motion-picture television shot upon another on a screen

**dis-so-nance** \di-sə-nən(t)s/ *n* (15c) 1 a: lack of agreement; esp. consistency between the beliefs one holds or between one's actions and one's beliefs — compare COGNITIVE DISSONANCE b: an instance of such inconsistency or disagreement 2: a mingling of discordant sounds; esp.: a clashing or unresolved musical interval or chord

**dis-so-nant** \-nən(t) *adj* [MF or L; MF, fr. *L. dissonant*, *dissonare*, of *dissonare* to be discordant, fr. *dis-* + *sonare* to sound — more at SOUND] (15c) 1: marked by dissonance 2: DISCORDANT 3: DISGRACIOUS 3: harmonically unresolved — **dis-so-nant-ly** *adv*

**dis-suade** \di-'swād/ *v* **dis-suad-ed**; **dis-suad-ing** [MF or L; *ME* *suader*, fr. *L. dissuadere*, fr. *dis-* + *suadere* to urge — more at SWADE] (15c) 1 a: to advise (a person) against something b *archaic*: to argue against (an action) 2: to turn from something by persuasion — **dis-suad-er** *n*

**dis-sua-sion** \di-'swā-zhən/ *n* [MF or L; MF, fr. *L. dissuasion*, *dissuadere*] (15c) : the action of dissuading

**dis-sua-sive** \di-'swā-siv-, -ziv/ *adj* (1609) : tending to dissuade — **dis-sua-sive-ly** *adv* — **dis-sua-sive-ness** *n*

**dis-syl-la-ble** \di-'si-lə-bəl/ (J)(di)s-'si-, 'di-'si-, (J)(di-'si-/ *var* of DISYLLABLE

**dis-sym-me-try** \-(J)(di)s-'si-mə-'trē/ *n* (1845) : the absence of or the lack of symmetry — **dis-sym-me-tric** \-(J)(di)s-'si-mə-'trik/ *adj*

**dis-staff** \di-'staf/ *n*, *pl* **distaffs** \-'tafs, -'tavz/ [ME *distaf*, fr. OE *distaf*, fr. *dis-* (akin to MLG *dise* bunch of flax) + *staf* staff] (bef. 12c) 1 a: a staff for holding the flax, tow, or wool in spinning b: woman's work or domain 2: the female branch or side of a family

**distaff** *adj* (ca. 1633) : MATERNAL (the ~ side of the family) — compare SPEAR; also: FEMALE (~ executives)

**dis-tain** \dis-'tān/ *v* [ME *disteynen*, fr. MF *des-teindre* to take away the color of, fr. OF; fr. *des-* *dis-* + *teindre* to dye, fr. *L. tingere* to wet, dye — more at TINGE] (14c) 1 *archaic*: STAIN 2 *archaic*: DISHONOR

**dis-tal** \dis-'təl/ *adj* [*distant* + *-al*] (1808) 1: situated away from the point of attachment or origin or a central point esp. of the body — compare PROXIMAL 2: of, relating to, or being the surface of a tooth that is next to the tooth behind it or that is farthest from the middle of the front of the jaw — compare MEXIAL

**distal convoluted tubule** *n* (ca. 1901) : the convoluted portion of a nephron that lies between the loop of Henle and the secretory part of the nephron and that is concerned esp. with the concentration of urine

**dis-tance** \dis-'tæn(t)s/ *n* (14c) 1 *obs*: DISCORD 2 a: separation time b: the degree or amount of separation between two points, surfaces, or objects c (1): an extent of area or an advance along a route measured linearly (2): an extent of space measured other than linearly (within walking ~) d: an extent of advance from a starting point e: EXPANSE f (1): length of a race or contest (won at a ~) (2): the full length (as of a prizefight or ball game) (3): a long (~ training) 3: the quality or state of being distant as: a: sparseness b: personal and esp. emotional separation; also: RESOLVEDNESS c: DIFFERENCE, DISPARITY 4: a distant point or place 5 a: AESTHETIC DISTANCE b: capacity to observe dispassionately **go the distance also last the distance**: to complete a course of

**distance** *v* **dis-tanced**; **dis-tanc-ing** (1578) 1: to place or keep at distance 2: to leave far behind: OUTSTRIP

**distance learning** *n* (1972) : learning that takes place via electronic media linking instructors and students who are not together in a room

**dis-tant** \dis-'tənt/ *adj* [ME, fr. MF, fr. *L. distant*, *dis-* + *stare* to stand apart, be distant, fr. *dis-* + *stare* to stand — more at STAND] (14c) 1 a: separated in space: AWAY b: situated at a great distance c: separated by a great distance from each other (far ~ far behind (finished a ~ third) 2: separated in a relationship other than spatial (a ~ cousin) (the ~ past) 3: different in kind or served or aloof in personal relationship: COLD 5 a: going a long distance (~ voyages) b: concerned with remote things (~ the ~) — **dis-tant-ly** *adv* — **dis-tant-ness** *n*

**dis-taste** \-(J)(di)s-'tāst/ *v* (1592) 1 *archaic*: to feel aversion to 2 *ic*: OFFEND, DISPLEASE ~ *vi*, *obs*: to have an offensive taste

**distaste** *n* (1598) 1 a *archaic*: dislike of food or drink b: AVERSION, DISINCLINATION (a ~ for opera) 2 *obs*: ANNOYANCE, DISCOMFORT

**dis-taste-ful** \-(J)(di)s-'tāst-fəl/ *adj* (1607) 1: objectionable because offensive to one's personal taste: DISAGREEABLE 2: unpleasant or repulsive: LOATHSOME — **dis-taste-ful-ly** \-fəl-/ *adv* — **dis-taste-fulness** *n*

**fink** \ˈdɪʃ-ṭl-,fɪŋk-/ **dis-** + *n* [PaG *dischdelfink*, thistle + *fink*/finch] (1939) : a traditional Pe motif in the form of a stylized bird  
**distemper** \di-'stem-pər/ *vi* [ME *distempren*, fr. L *cādly*, fr. L *dis-* + *temperare* to temper] (14c)  
1 *archaic*: DÉRANGE; UNSETTLE  
2 *n* (ca. 1555) -1: bad humor or temper -2: bodily state esp. of quadruped mammals: contagious disease esp. of dogs that is caused by *Bordetella pertussis* and is marked by fever, leukopenia, and neurological symptoms b KOPENIA 3: AILMENT, DISORDER (politic - *dis-tem-per-ate* \-(pə-)rət/ *adj*)  
**distill** *n* [obs. *distemper*, v., to dilute, mix to produce MF *destemper*, fr. L *dis-* + *temperare*] (1632)  
in which the pigments are mixed with an emulsifier, or with white of egg as a vehicle and which is used for murals: 2 a: the paint or the preparatory process - b: a painting done in distemper-based paints  
**distemper** *vi* (ca. 1873): to paint in or with distemper  
**distemperature** \di-'stem-p(ə)-rə-,chūr-, p(ə-)r-, cəl-/ *n* (1531): a disordered condition  
**distend** \di-'stend-/ *vb* [ME, fr. L *distendere*; fr. *dis-* + *tēndere* to stretch] (15c). 1: EXTEND - 2: to enlarge or swell ~ *vi*: to become expanded ~ *syn* *stretch* - *distensible* \-'sten(t)(ə-sə-bəl/ *adj* [*distens.* (fr. L *distendere*) (ca. 1828): capable of being distended - *ti-sə-'bi-lə-tē'n*  
**distension** or **dis-tension** \di-'sten(t)-shən/ *n* [L *distensionem*] (15c): the act of distending or the state of being distended or abnormally enlarged  
**distich** \('tɪk/ *n* [L *distichon*, fr. Gk, fr. neut. o *distichos*, fr. *di-* + *stichos* row; verse; akin to Gk *steichō* to march] (1553): a strophic unit of two lines  
**distichous** \Vdis-tī-kəs/ *adj* [LL *distichus*, fr. Gk *distichos*, from *di-* + *stichos* row] (16c): consisting of two lines in two vertical rows (~ leaves)  
**distil** or **distill** \di-'stil/ *vb* **dis-tilled**; **dis-til-ling** *fr.* LL *distillare*, alter. of L *desillare*, fr. *desilla* drop] *vi* (14c) - 1: to let fall, exude, or pour out - 2 a: to subject to or transform by vaporizing or as if by distillation - c: to extract the essence from - *ti* 1 a: to fall or materialize in drops or in small quantities at a time - 2 a: to perform distillation  
**distillation** \Vdis-tāt-lāt-,lat/ *di-'sti-lat* *n* (ca. 1859) -1: the process of separating components of a mixture from vapor during distillation - 2: something distilled as if by distilling  
**distillate** \Vdis-tāt-'lā-shən/ *n* (14c) - 1 a: the product of distillation - b: the residue left after successive evaporation and condensation - *also*: an instance of distilling - 2: something distilled  
**distiller** \di-'sti-lər/ *n* (1577): one that distills esp. alcohols  
**distillery** \di-'sti-l-er-, 'sti-l-ēr/ *n*, pl *-eries* (1759): a place where alcoholic liquors are done  
**distinct** \di-'stɪŋkt/ *adj* [ME, fr. MF; fr. L *distinctus* separated] (14c) - 1: distinguishable to the eye or mind - 2: clearly different - 3: presenting a clear contrast - *neat* ~ handwriting 3 *archaic*: notable - *a* ~ contribution to scholarship - *b*: r comprehended (*a* ~ possibility) - **dis-tinct-ness** \di-'stɪŋkt-nəs/ *n* [*dis-* + *stinct*, SEPARATE, DISTRICT mean not being the same. DISTINCT indicates that something is separate or eye as being apart or different from others. SEPARATE often stresses lack of connection between two things (*separate rooms*). DISTRIBUTE stresses individuality and lack of connection (between stages). *syn* see in addition EVIDENT  
**discern** \di-'stɪŋ(k)-shən/ *n* (13c) - 1 *archaic*: to perceive - 2: the distinguishing of a difference (with attention); *also*: the difference distinguished (between two things) - 3: something that distinguishes (between two things) or state of being distinguishable - 5 a: to be distinguished or worthy (a politician of some distinction took a law degree with ~ of valedictorianism that sets one apart (the ~ of valedictorianism))  
**discriminate** \di-'skrɪ-mɪ-neɪt/ *adj* (15c) - 1 a: serving to distinguish or give style or distinction - 2: capable of being distinguished - *different in meaning as well as in sound* f discrimination - *syn* see CHARACTERISTIC - **discriminative-ness** *n*  
**discern** \di-'sɛn-/ *v* [*dis-* + *cernere* to discern] IF, fr. L *discernere* to distinguish esp. in manner or bearing  
**discriminate** \di-'skrɪ-mɪ-neɪt/ *vb* [MF *discutier*, fr. L *discutere* to prick, fr. *dis-* + *cutere* (akin to L *cutere* at STICK)] *vi* (1561) - 1: to perceive a difference - 2: to be like they could not be ~ed - 2 a: to separate into kinds, classes, or orders - b: to make a distinction or ~ed themselves - 3 a: DISCERN ~ed a light in the darkness - 3 b: TAKE SPECIAL NOTICE OF ~ *vi*: to perceive a difference - *discriminability* \di-'skrɪ-mɪ-nə-bəl/ *n* - *discriminably* \di-'skrɪ-mɪ-nə-bəl/ *adv* (1714) - 1: marked by eminence, especially in character - 2: befitting an eminent person - *syn* see FAIRLY  
**Conduct Medal** *n* (1862): a British military decoration awarded for heroic conduct distinguished conduct in the field  
**Flying Cross** *n* (1918) - 1: a British military decoration awarded for gallantry while flying in operation - 2: U.S. military decoration awarded for heroism while participating in an aerial flight



characterized by degeneration and inflammation of skeletal and cardiac muscle and lesions of the central nervous system.

**en-ceph-a-lon** \in-'se-fə-lān, -lən/ *n*, *pl* -lā \lā/ [NL, fr. Gk *enkephalos*] (1741): the vertebrate brain

**en-ceph-a-lo-pa-thy** \in-'se-fə-lā-pə-thē/ *n* (1866): a disease of the brain; esp.: one involving alterations of brain structure — **en-ceph-a-lo-path-ic** \lā-'pə-thik/ *adj*

**en-chain** \in-'chān/ *v* [ME *encheynen*, fr. MF *enchainer*, fr. OF, fr. *en-* + *chaîne* (chain) (14c): to bind or hold with or as if with chains] — **en-chain-ment** \-'mən-t/ *n*

**en-chant** \in-'chant/ *v* [ME, fr. MF *enchanter*, fr. L *incantare*, fr. *in-* + *cantare* to sing — more at **CHANT**] (14c): 1: to influence by or as if by charms and incantation: BEWITCH (2): to attract and move deeply: rouse to ecstatic admiration (the scene *en*ed her to the point of tears — Elinor Wylie); *syn* see **ATTRACT**

**en-chant-er** *n* (13c): one that enchants; esp.: **SORCERER**

**en-chant-ing** \ad- (1606): CHARMING — **en-chant-ing-ly** \-'chan-tin-lē/ *adv*

**en-chant-ment** \in-'chant-mənt, -ən/ *n* (13c): 1: the act or art of enchanting: b: the quality or state of being enchanted (2): something that enchants

**en-chant-ress** \in-'chan-trəs, -ən/ *n* (14c): 1: a woman who practices magic: **SORCERESS** (2): a fascinating woman

**en-chase** \in-'chās/ *v* [ME, to emboss, fr. MF *enchasser* to enshrine, set, fr. *en-* + *chasse* reliquary, fr. L *capsa* case — more at **CASE**] (15c): 1: ORNAMENT: as: a: to cut or carve in relief: b: INLAY (2): SET 17b

**en-chi-la-da** \en-'chī-lā-də/ *n* [AmerSp, fr. fem. of *enchilado*, pp. of *enchilar* to season with chili, fr. Sp *en-* + *chile* chili] (1887): 1: a rolled filled tortilla covered with chili sauce and usu. baked (2): SCHMEAR, BALL OF WAX (the whole ~)

**en-chi-rid-i-on** \in-'kī-ri-dē-ən, -'kī-/ *n*, *pl* -rid-iā \-dē-/ [LL, fr. Gk *encheiridion*, fr. *en* in + *cheir* hand — more at **IN, CHIR**] (15c): HAND-BOOK, MANUAL

**en-chy-ma** \en-'kə-mə/ *n* *comb form*, *pl* -en-chy-ma-ta \-'kī-mə-tə, -'kī-mə-/ or -enchymas [NL, fr. *parenchyma*]: cellular tissue (colle-*chyma*)

**en-ci-pher** \in-'si-fər, -ər/ *v* (1577): to convert (a message) into cipher — **en-ci-pher-er** \-fər-ər/ *n* — **en-ci-pher-ment** \-'fər-mənt/ *n*

**en-clir-cle** \in-'skr-əl, -əl/ *v* [ME *enclerclen*] (15c): 1: to form a circle around: SURROUND (2): to pass completely around — **en-clir-cle-ment** \-'mən-t/ *n*

**en clair** \ā-'klēr/ *adv* or *adj* [F, in clear] (ca. 1897): in plain language (a message sent *en clair*)

**en-clasp** \in-'klāsp, -ən/ *v* (1596): to seize and hold: EMBRACE

**en-clave** \en-'klāv, -ən/ *n*, *pl* -āv, -ān/ [F, fr. MF, fr. *enclaver* to en-close, fr. (assumed) VL *includere* to lock up, fr. L *in-* + *clav* key — more at **CLAVICLE**] (1868): a distinct territorial, cultural, or social unit enclosed within or as if within foreign territory (ethnic ~)

**en-clit-ic** \en-'kli-tik/ *n* [LL *encliticus*, fr. Gk *enklitikos*, fr. *enklēsthai* to lean on, fr. *en-* + *klēin* to lean — more at **LEAN**] (ca. 1663): a clitic that is associated with a preceding word — **en-clit-ic** *adj*

**en-close** \in-'klōz, -ən/ *v* [ME, prob. fr. *enclos* enclosed, fr. MF, pp. of *enclore* to enclose, fr. (assumed) VL *includere*, alter. of L *includere* — more at **INCLUDE**] (14c): 1: a (1): to close in: SURROUND (~ a porch with glass) (2): to fence off (common land) for individual use: b: to hold in: CONFINE (2): to include along with something else in a parcel or envelope (a check is enclosed herewith)

**en-clo-sure** \in-'klō-zhər, -ən/ *n* (15c): 1: the act or action of enclosing: the quality or state of being enclosed (2): something that encloses (3): something enclosed (a letter with two ~s)

**en-code** \in-'kōd, -ən/ *v* (ca. 1919): 1: to convert (as a body of information) from one system of communication into another; esp.: to convert (a message) into code (2): to specify the genetic code for — **en-cod-er** *n*

**en-co-mi-ast** \en-'kō-mē-ast, -mē-ast/ *n* [Gk *enkōmiastēs*, fr. *enkōmiastēs* to praise, fr. *enkōmiōn*] (1610): one that praises: **EULOGIST** — **en-co-mi-as-tic** \-'kō-mē-as-tik/ *adj*

**en-co-mi-um** \en-'kō-mē-əm/ *n*, *pl* -mī-as or -mīa \-mē-/ [L, fr. Gk *enkōmiōn*, fr. *en* in + *kōmos* revel, celebration] (1589): glowing and warmly enthusiastic praise; also: an expression of this

*syn* ENCOMIUM, EULOGY, PANEGRIC, TRIBUTE, CITATION mean a formal expression of praise. ENCOMIUM implies enthusiasm and warmth in praising a person or a thing. EULOGY applies to a prepared speech or writing extolling the virtues and services of a person. PANEGRIC suggests an elaborate often poetic compliment. TRIBUTE implies deeply felt praise conveyed either through words or through a significant act. CITATION applies to the formal praise accompanying the mention of a person in a military dispatch or in awarding an honorary degree.

**en-com-pass** \in-'kəm-pəs, -ən/ *also* -'kām-/ *v* [ME] (14c): 1: a: to form a circle about: ENCLOSE *b* obs: to go completely around (2): a: ENVELOPE: b: INCLUDE (a plan that ~es a number of aims): 3: BRING ABOUT, ACCOMPLISH (~ a task) — **en-com-pass-ment** \-'pə-smənt/ *n*

**en-core** \ān-'kōr, -kōr/ *n* [F, still, again] (1712): a demand for repetition or reappearance made by an audience; also: a reappearance or additional performance in response to such a demand

**en-core** *vt* **en-cored**; **en-cor-ing** (1748): to request an encore of or by

**en-coun-ter** \in-'kaun-tər, -ən/ *vb* **en-coun-tered**; **en-coun-ter-ing** \-'kaun-t(ə)-rɪŋ/ [ME *encountren*, fr. MF *encontrer*, fr. ML *incontrāre*, fr. LL *incontra* toward, fr. L *in-* + *contra* against — more at **COUNTER**] (14c): 1: a: to meet as an adversary or enemy: b: to engage in conflict with (2): to come upon face-to-face (3): to come upon esp. unexpectedly ~ *vi*: to meet esp. by chance

**en-counter** *n* (14c): 1: a: a meeting esp. between hostile factions or persons: b: a sudden often violent clash: COMBAT (2): a chance meeting: b: a direct often momentary meeting (3): a coming into the vicinity of a celestial body (the Martian ~ of a spacecraft)

**en-counter group** *n* (1967): a: a group of individuals that seeks to develop the capacity of the individual to express feelings and to form emotional ties by unrestrained confrontation of individuals

**en-cour-age** \in-'kər-ij, -kə-rɪj, -ən/ *v*, *aged*; **ag-ing** [ME *encoragere*, fr. MF *encoragier*, fr. OF, fr. *en-* + *corage* courage] (15c): 1: to inspire with courage, spirit, or hope: HEARTEN (2): to spur on: STIMULATE (3): to give help or patronage to: FOSTER — **en-cour-age-er** *n*

*syn* ENCOURAGE; INSPIRE, HEARTEN, EMBOLDEN mean to courage or strength of purpose. ENCOURAGE suggests the one's confidence esp. by an external agency (the teacher's *couraged* the students to greater efforts). INSPIRE, somewhat implies instilling life, energy, courage, or vigor into something. HEARTEN implies the people to resist. HEARTEN implies the dispiritedness or despondency by an infusion of fresh courage (a hospital patient *heartened* by good news). EMBOLDEN implies giving of courage sufficient to overcome timidity or reluctance (a woman *emboldened* by her first success, she tried an even more difficult task).

**en-cour-age-ment** \-'li-mənt, -rɪ-/ *n* (1568): 1: the act of encouraging: the state of being encouraged (2): something that encourages

**en-cour-ag-ing** \-'li-jɪŋ, -rɪ-jɪŋ/ *adj* (1593): giving hope or procuring courage

**en-cour-ag-ing-ly** \-'li-jɪŋ-lē/ *adv*

**en-crim-son** \in-'krɪm-zən/ *v* (1597): to make or dye crimson

**en-croach** \in-'krōch, -ən/ *v* [ME *encrochen* to get, seize, fr. *en-* + *croch*, fr. OF, fr. *en-* + *croc*, *croche* hook — more at **CROC**] (1534): 1: to enter by gradual steps or by stealth into the possessions of another: 2: to advance beyond the usual or proper limits: gradually ~ing sea) *syn* see **TRESPASS** — **en-croach-er** \-'krōch-mənt/ *n*

**en-croach-ment** \-'krōch-mənt/ *n*

**en-crust** \in-'krast, -ɪŋ/ *vb* [prob. fr. L *incrustare*, fr. *in-* + *crusta* crust] (1641): to cover, line, or overlay with or as if with a crust — **en-crust-ment** \-'krast-mənt/ *n*

**en-crust-a-tion** \in-'kras-tā-shən, -ən/ *n* *var* of **INCRUSTATION**

**en-crypt** \in-'kript, -ən/ *v* [en- + *crypt* (as in *cryptogram*)] (15c): 1: to convert into code: 2: to convert into code: 3: to convert into code: 4: to convert into code: 5: to convert into code: 6: to convert into code: 7: to convert into code: 8: to convert into code: 9: to convert into code: 10: to convert into code: 11: to convert into code: 12: to convert into code: 13: to convert into code: 14: to convert into code: 15: to convert into code: 16: to convert into code: 17: to convert into code: 18: to convert into code: 19: to convert into code: 20: to convert into code: 21: to convert into code: 22: to convert into code: 23: to convert into code: 24: to convert into code: 25: to convert into code: 26: to convert into code: 27: to convert into code: 28: to convert into code: 29: to convert into code: 30: to convert into code: 31: to convert into code: 32: to convert into code: 33: to convert into code: 34: to convert into code: 35: to convert into code: 36: to convert into 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S E C O N D E D I T I O N

# Calculus

## of a Single Variable

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## 3.1

## EXTREMA OF FUNCTIONS

We begin this section by looking informally at the property that a curve and its tangent line exhibit similar behavior near the point of tangency. We then make our observations more precise and turn to the problem of finding extreme values for a function  $f$ .

In Figure 3.1, the line  $l$  is tangent to the graph of the function  $f$  at the point  $P(a, f(a))$ . Note that  $l$  has a positive slope: It rises vertically as it moves from left to right. The graph must exhibit this same rising property near  $x = a$ . In terms of the function  $f$ , we see that as  $x$  increases through  $a$ , the values of  $f(x)$  also increase. Since the slope of the tangent line at  $P$  is the derivative  $f'(a)$  of the function  $f$  at  $x = a$ , we conclude: If  $f'(a) > 0$ , then  $f$  is increasing at  $a$ .

Examining the situation at the point  $Q = (b, f(b))$  on the graph of  $f$ , we see that the tangent line  $l^*$ , which has a negative slope, falls vertically as it moves from left to right. The graph of  $f$  near  $Q$  also drops as it passes through  $x = b$ . We conclude: If  $f'(b) < 0$ , then  $f$  is decreasing at  $b$ .

These conclusions are clearly valid only near the point of tangency. The similarity between the behavior of the tangent line  $l$  and the behavior of the function  $f$  holds only when the line and the curve are close to each other, and the tangent line is guaranteed to be close to the curve only near the point of tangency. The line and the curve can drift far apart as we move away from the point of tangency. The tangent line  $l$  at point  $P$  in Figure 3.1 continues to rise forever, but this behavior is not true for the graph of  $f$ . Indeed, we have seen that  $f$  is decreasing at  $Q$ .

At the point  $R(c, f(c))$  on the graph of  $f$ , in Figure 3.1, the tangent line  $l'$  is horizontal: It is neither rising nor falling. The graph in Figure 3.1 shows the behavior of the function near this point: The function is decreasing as it approaches  $x = c$  and is increasing afterward. We can say that the function  $f$  has a local minimum value at  $x = c$ —that is, near  $x = c$ , all the values of  $f(x)$  are greater than  $f(c)$ .

Our reasoning here has been geometric and informal. To make our conclusions more precise, let us now consider a graph that represents variations in some physical quantity such as temperature, resistance in an elec-

Figure 3.1

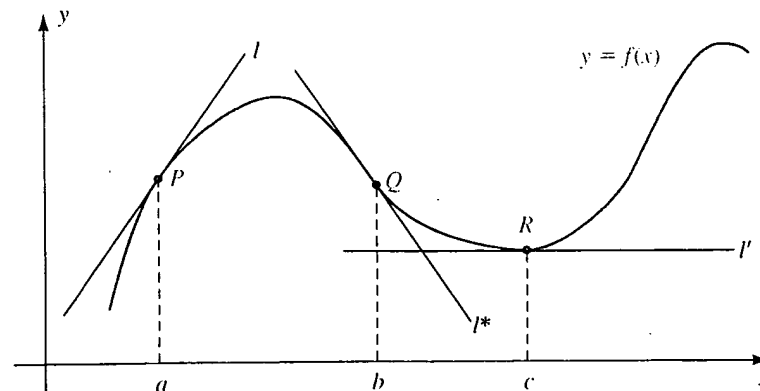
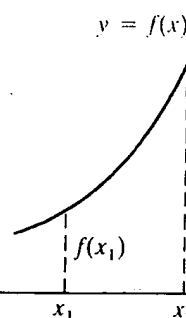


Figure 3.3

Increasing function



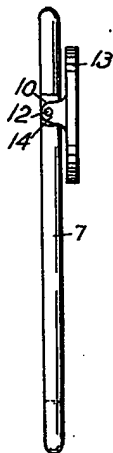
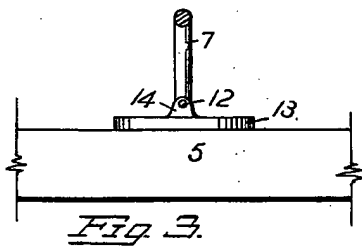
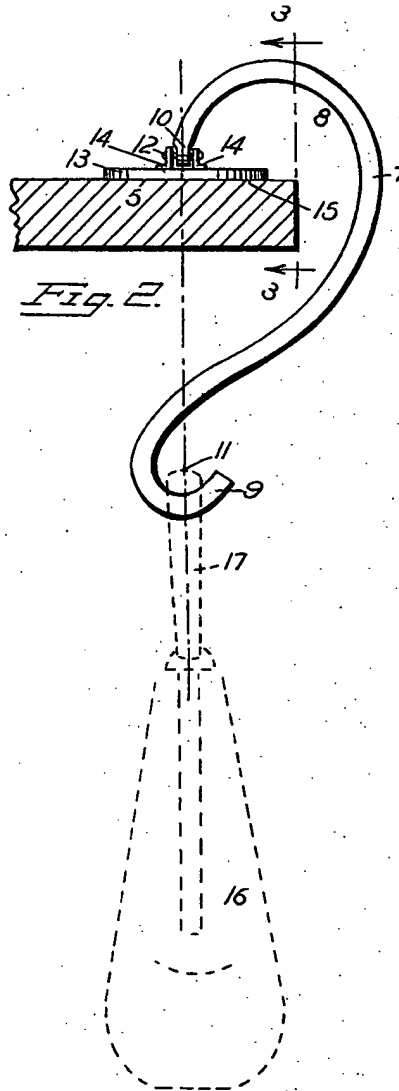
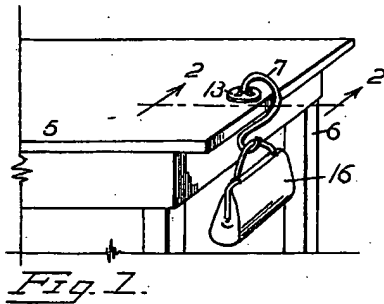
Dec. 15, 1936.

A. VON SCHROEDER

2,064,133

HANGER FOR HANDBAGS AND THE LIKE

Filed March 12, 1935



INVENTOR  
ALBRECHT VON SCHROEDER

BY

*G. J. D. D. D.*  
ATTORNEY.

## UNITED STATES PATENT OFFICE

2,064,133

## HANGER FOR HANDBAGS AND THE LIKE

Albrecht von Schroeder, Denver, Colo.

Application March 12, 1935, Serial No. 10,672

2 Claims. (Cl. 242-214)

This invention relates to improvements in folding supports for handbags and the like.

Ladies ordinarily carry handbags of different sizes and when they go to a restaurant for meals, or sit down at a card table, the handbag must either be laid upon the table, or held in the lap, both ways of which are inconvenient. Since women usually carry money and other valuables in their handbags, it is necessary to keep them in view at all times, to prevent unauthorized persons from obtaining access to them.

It is the object of this invention to produce a hook or support of such construction that it can be readily carried in the handbag and which shall be so designed that it can be used for supporting the handbag from the edge of a table and which makes it possible for a woman to keep her handbag within sight and easy reach when seated at a table.

The improved support or hook that forms the subject of this invention will now be described in detail and for this purpose reference will be had to the accompanying drawing on which it has been illustrated in its preferred form and in which

Figure 1 is a fragmentary perspective view of a card table showing a handbag supported from the edge thereof by the improved hook;

Figure 2 is a section through the edge of the table, taken on line 2-2, Figure 1, and shows the hook in place thereon, the handbag being indicated by dotted lines;

Figure 3 is a section taken on line 3-3, Figure 2, but shows only a portion of the hook; and

Figure 4 is an edge elevation of the hook showing the same in folded position and ready to be inserted into the handbag.

In the drawing, reference numeral 5 designates the top of a table, which in Figure 1 has been shown as an ordinary card table provided with foldable legs 6. The hook 7 is formed from a wire or rod of any suitable material such as steel or brass, and whose surface may have any desirable finish such as nickel, silver or gold plating. The hook is so bent that it resembles, in a general way, the letter S, the upper loop 8 being quite large in comparison with the lower loop 9, all as shown in Figure 2. The end 10 of loop 8 is directed downwardly and has its center in a plane x-x which passes through the center 11 of the loop 9. End 10 is flattened and its sides lie in spaced planes perpendicular to the plane of the hook. End 10 is provided with an opening for the reception of the pivot pin 12. A plate 13, which may be either circular or oblong, is provided on its upper surface with two lugs or ears 14 that are spaced to receive the end 10, and provided with openings for the reception of the pivot pin 12.

Plate 13 can be turned about pivot 12 from the position shown in Figures 2 and 3 to the position shown in Figure 4; in the latter position the hook

can be said to be folded and can be easily put into the handbag or a pocket.

When the hook is to be employed for supporting a handbag or any other object, the plate 13 is turned from the position shown in Figure 4 to that shown in Figures 2 and 3, and the hook is put into position over the edge of the table in the manner shown in Figures 1 and 2. The flat surface of the plate engages the table top and prevents it from becoming scratched or marred. The under surface of the plate may have a covering of rubber or felt if desired.

After the hook has been put into position, the handbag, designated by numeral 16, may be hung by its handle 17 from the loop 9. It will be seen from the drawing that the hook can swing about the axis of the pivot 12, but not in the opposite direction. The handbag can be supported in either closed or open position, and when it is open, the owner has ready access to it at all times, which is a great convenience.

After the hook has been used, it is removed and the plate 13 turned into the position shown in Figure 4, in which position it takes up very little space.

Although the hook is primarily intended to support handbags, it is evident that it can be employed for supporting any other articles such as clothing.

In the claims the words "upper" and "top" are employed to designate the end of the hook having the enlarged loop and the "bottom" or "lower" the end having the small loop 9.

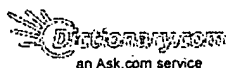
Having described the invention, what is claimed as new is:

1. A support comprising in combination, a hook-portion of substantially S-shape, the upper loop being larger than the lower and adapted to extend over the edge of a table top, the lower loop serving as a hook to support an object, the end of the upper loop terminating in a portion whose axis extended intersects the lower loop, and a plate attached to the end of the upper loop by a pivot that is perpendicular to the axis and lies in the plane of the hook-portion, said plate serving to contact with a supporting surface.

2. A support comprising in combination a hook-portion of substantially S-shape, the end of the upper loop being directed downwardly so that its center line intersects the lower loop, the end of the upper loop having a plate attached thereto by a pivot pin that lies in the plane of the hook-portion and is perpendicular to the center line of the end of the loop, the plate being rotatable about the pivot from a plane perpendicular to the center line and into a plane parallel with the plane of the hook-portion.

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**swiv-el** [swiv-uhl] Pronunciation Key - Show IPA  
Pronunciation *noun, verb, -eled, -el-ing or (especially British) -elled, -el-ing.*

## -noun

1. a fastening device that allows the thing fastened to turn around freely upon it, esp. to turn in a full circle.
2. such a device consisting of two parts, each of which turns around independently, as a compound link of a chain, one part of which turns freely in the other by means of a headed pin or the like.
3. a pivoted support allowing a gun to turn around in a horizontal plane.
4. a swivel gun.
5. a device attached to a loom and used as a shuttle to weave extra threads in the production of small figures, esp. dots.

## -verb (used with object)

6. to turn or pivot on or as if on a swivel: *He swiveled his chair around.*
7. to fasten by a swivel; furnish with a swivel.

## -verb (used without object)

8. to turn on or if as on a swivel.

[Origin: 1275-1325; ME (n.), equiv. to swiv- (weak s. of OE *swifan* to revolve; c. ON *svifa* to turn) + -el instrumental suffix]

## -Related forms

**swiv-el-like**, adjective

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**swiv-el** (swiv'əl) Pronunciation Key

n.

1. A link, pivot, or other fastening so designed that it permits the free turning of attached parts.
2. A pivoted support that allows an attached object, such as a chair or gun, to turn in a horizontal plane.



turn or girth, to turn in a horizontal plane.

3. A gun that turns on a pivot.

**v. swiv-eled or swiv-elled, swiv-el-ing or swiv-el-ling, swiv-els**

**v. tr.**

1. To turn or rotate on or as if on a swivel.
2. To secure, fit, or support with a swivel.

**v. intr.**



To turn on or as if on a swivel.

[Middle English swyvel.]

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**swivel** (n.)

1307, from frequentative form of stem of O.E. verb *swifan* "to move in a course, sweep" (a class I strong verb), from P.Gmc. \**swipanan* (cf. O.Fris. *swiva* "to be uncertain," O.N. *svifa* "to rove, ramble, drift"), from PIE base \**swel-* "swing, bend, move in a sweeping manner." M.E. *swive* was the principal slang for "to have sexual intercourse with," a sense that developed c.1300. This probably explains why, though the root is verbal, the verb *swivel* is not attested in Mod.Eng. until 1794.

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**swivel**

*noun*

1. a coupling (as in a chain) that has one end that turns on a headed pin

*verb*

1. turn on a pivot [syn: pivot]

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**Swivel**

*Swiv"el*, n. [AS. *sw[=i]fan* to move quickly, to remove; akin to Icel. *sveifla* to whirl, shake, *sv[=i]fa* to ramble, to turn. See *Swoop*, and cf. *Swift* a reel, *Swift*, a.]

1. (Mech.) A piece, as a ring or hook, attached to another piece by a pin, in such a manner as to permit rotation about the pin as an axis.

2. (Mil.) A small piece of ordnance, turning on a point or swivel; -- called also *swivel gun*. --Wilhelm.

*Swivel bridge*, a kind of drawbridge that turns round on a vertical axis; a swing bridge.

*Swivel hook*, a hook connected with the iron strap of a pulley block by a swivel joint, for readily taking the turns out of a tackle.

*Swivel joint*, a joint, the two pieces composing which turn round, with respect to each other, on a longitudinal pin or axis, as in a chain, to prevent twisting.

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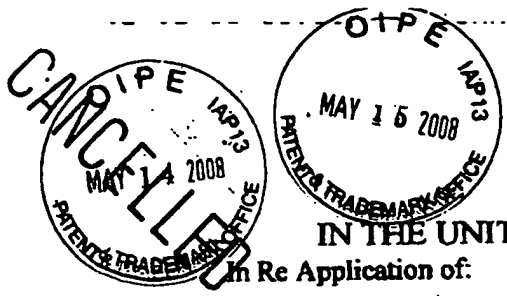
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

Examiner: Le, Tan

Group Art Unit: 3632

**Declaration**

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Board of Patent Appeals and Interferences

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**DECLARATION OF LENNA BAUERLY**  
**UNDER 37.8 CFR 1.116(e) and 1.68**

I, Shelly Lenna Bauerly, am the named inventor and owner of U.S. Patent Application No. 10/763,426 by Bauerly, entitled "Purse Hanger," filed on January 23, 2004.

The development of a working model of the claimed invention consisted of numerous experiments, including many designs that failed to achieve the design initiatives.

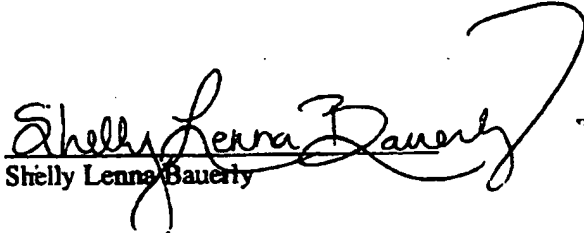
The design of the rigid arm and chain combination, as described in the patent application, that would remain stable when supporting a purse from a table top, was only achieved after that experimentation and failure by actual models.

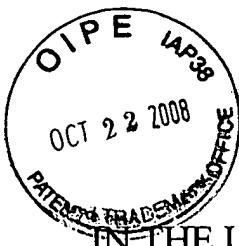
Additional experimentation with various designs was undertaken to develop a means of reducing the likelihood that a purse and hanger would be knocked off a table by a slight bump or brush of a passer-by. Various rubber and cork surfaces were not sufficient to prevent the purse hanger from sliding off of a table when brushed by a passer by. Attempts to suspend a purse sufficiently far under a table to minimize brushing resulted in impractical designs. Eventually, the swivel joint described in the invention was conceived to allow the purse to rotate freely when bumped, thereby releasing rotational energy without the purse hanger pivoting off a table top due to that rotational energy. When experiments were conducted with this design, it greatly enhanced the stability of the purse hanger when a purse hanging therefrom was bumped or brushed by a passer-by.

I certify under penalty of perjury that I have actual knowledge of all claims and assertions set forth in the foregoing statement, and that foregoing statement is true and accurate. I am aware that willful false statements and the like are punishable by fine or

imprisonment or both under 18 U.S.C. § 1001 and may jeopardize the validity of the application, or any patent issuing thereon.

Signed by my hand this 10<sup>th</sup> day of May, 2008

  
Shelly Lenna Bauerly



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:	)	Examiner: Le, Tan
	)	
Shelly Lenna Bauerly	)	Group Art Unit: 3632
	)	
Application Serial No. 10/763,426	)	<b>Evidence Appendix for Appeal Brief</b>
	)	<b>under 37 CFR 41.37</b>
Filed: January 23, 2004	)	
	)	
For: Purse Hanger	)	Ronald R. Shea
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**EVIDENCE APPENDIX**

Submitted in conjunction with the Appeal Brief under 37 CFR 41.37 for U.S. Patent Application 10/763,426.

## PURSE HANGER

### BACKGROUND OF THE INVENTION

5

#### Field of the Invention

The present invention is directed to the field of mechanical devices. More particularly, the present invention is directed to a purse hanger for hanging purses and handbags from tabletops and surfaces.

10

#### Description of the Prior Art

At coffeehouses, restaurants, bars, or indoor and outdoor cafes, people crowd at tables with limited space. In addition to space for food and drink, table tops are often called upon to support ash trays, chess boards, books, newspapers, etc. Those who carry purses and handbags often crowd their handbags into the center of the table. Purses and handbags on a tabletop reduce the space on the tabletop, and are an annoyance when reaching for food, drink, or other items. Some handbag users choose to sit with their handbags on their respective laps, creating a less than leisurely atmosphere. Others elect to place their handbag on the floor or sidewalk next to their chair, under their chair, or beneath the table. Multiple inconveniences abound from these options, however. Floors and sidewalks are often unsanitary, and wholly unsuitable for contact with anything other than the bottom of one's shoe. Additionally, purses and handbags which are placed next to or under a chair are completely out of the line of sight of the owner, and can be stolen without the knowledge of the owner until it is time to leave. Even when not stolen, the vigilance required to continually check on a purse or handbag beneath a chair again detracts from the leisure and pleasure of a café or restaurant experience.

Purse hangers for hanging a purse from a table often align the weight of a purse in an unstable position, causing the purse holder to slide off the table. Bolting or fastening a purse hanger to a table top prevents a purse hanger from sliding off the table, but are only useful

when a purse owner sits at the table fitted with the fixed-in-place purse hanger. Prior art purse hangers that are carried in a purse are easily lost within the purse, and difficult to find among other various items stored within a purse.

5        There remains therefore a need for a purse holder that can easily be located without becoming lost in the purse of a user. There is also a need for a purse holder that will not readily slide off a tabletop.

### **BRIEF SUMMARY OF THE INVENTION**

10

According to an embodiment of the invention, a purse hanger for hanging a purse from a flat surface comprises a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface. A rigid arm has a proximal end coupled with the rigid interface member and a distal end oriented vertically beneath the planar interface area. The proximal end can be swivelably coupled to the rigid interface member, or fixedly coupled, according to alternative embodiments. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member for engaging a strap of a purse.

20        According to one embodiment, the rigid arm is detachably coupled with the rigid interface member.

The rigid interface member can have a storage cavity, which can contain various personal items including, but not limited to one or more shades of lip gloss, foundation, make up, vitamins, drugs, a timepiece, a cellular telephone, a camera and combinations thereof. The storage cavity can be divided into multiple storage spaces by modular inserts.

30        A cover for covering the storage cavity has a securement means for securing the cover to the rigid interface member. The securement means may include, but is not limited to snaps, clasps, hooks, hinges, magnets, threaded members, and combinations thereof.

The rigid arm can include a horizontal extension parallel with the planar interface area, and a vertical extension that is about perpendicular to the horizontal extension.

The vertical extension can include a lengthening means for altering a length of the vertical extension. The flexible member will preferably have at least one swivel joint, which can  
5 include a top swivel member coupled to the distal end of the rigid arm, a bottom swivel member coupled to the purse engagement member, or a swivel link.

The purse engagement member is advantageously formed from a rigid loop having a movable loop member movably engaged to a primary loop member. When the movable loop  
10 member is in a first position, the purse engagement loop is a closed loop, and when the movable loop member is in a second position, the purse engagement member is an open loop. The movable loop member can be movably engaged to the primary loop member through a pivot means or through a slide means, such as a tubular member into which the movable loop member can retract. A spring member urges the movable loop member toward the first  
15 position.

A method for storing a purse hanger comprises the steps of securing the purse engagement member to a purse handle, opening the purse, flexing the flexible member, and, placing the rigid interface member within the purse, wherein the purse engagement member  
20 remains secured to the purse strap.

### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**

FIG. 1 is an isometric view of a purse supported from a table by the purse holder of  
25 the present invention.

FIG. 2 is an enlarged isometric view of an embodiment of the purse holder of FIG. 1 with a hinged movable loop member.

FIG. 3 is an isometric view of the purse holder of FIG. 1 partially stored within a purse  
30 while the purse engagement loop remains engaged to a purse handle.



FIG. 4 is an isometric view of the purse holder of FIG. 1 partially stored within a purse while the purse engagement loop remains engaged to a purse handle.

5 FIG. 5 is a top plan embodiment of the purse holder of FIG. 1 having a timepiece within the rigid interface member and a slide opening purse engagement member.

FIG. 6 is an isometric view of the flexible member of the purse holder of FIG. 1 comprising a swivel ball chain swivelably secured to an upper flexible member coupling.

10

FIG. 7 is an isometric view of a vertical extension portion of a rigid arm of the purse holder of FIG. 1 with a turnbuckle for adjusting the vertical length of the rigid arm.

15 FIG. 8 is a cross sectional view of the turnbuckle of FIG. 7 showing the interior thread engagement with the vertical extension.

FIG. 9 is an isometric view of an embodiment of the rigid interface member of FIG. 1 having a neck comprising a detachable ball and assembly.

20 FIG. 10 is an isolated view of the rigid interface member of FIG. 1 swiveling about the rigid arm.

FIG. 11 is a cross sectional top plan view of a threaded neck embodiment of the purse holder of FIG. 1 engaged with a threaded rigid arm.

25

FIG. 12 is a rear elevational view of the purse holder of FIG. 1 showing a swivel engagement of the rigid interface member with the rigid arm.

30 FIG. 13 is a front elevational view of an embodiment of the purse holder of FIG. 1 showing a hinged cover coupled to the top end of the rigid interface member and padding coupled to a bottom surface of the rigid interface member.

FIG. 14. is an isometric view of an embodiment of the purse holder of FIG. 13 with a mirror formed in the cover and lip gloss in the rigid interface embodiment.

5        FIG. 15 is a top plan view an embodiment of the purse holder of FIG. 1 with an enlarged knob and choke flange securing the rigid interface member to the rigid arm.

FIG. 16 an isometric view of the purse holder of FIG. 1 with a threaded cover and modular insert members fitting inside the rigid interface member, and a flexible member  
10        comprising gold braid surrounding a high tensile strength core.

FIG. 16a is a cross sectional view of the flexible member of FIG. 16.

FIG. 17 is an embodiment of the flexible member of FIG. 1 comprised of pearls strung  
15        around a high tensile strength core.

FIG. 18 is an alternative embodiment of a purse hanger having a rigid interface member comprising a frame with multiple legs.

20        FIG. 19 is the purse hanger of FIG. 1 having a rigid arm with a progressive curve.

## **DETAILED DESCRIPTION OF THE INVENTION**

### **Overview**

25        Referring primarily to FIGS. 1 and 2, a purse hanger 20 for hanging a purse 80 from a horizontal surface such as a tabletop 21 has a rigid interface member 22. As used herein, the term purse includes any handbag device having at least one handle 81 for carrying by hand, or for looping over a shoulder, and a compartment area for carrying personal items and chattels.

30        A rigid arm 45 extends horizontally outward from the rigid interface member. The rigid arm 45 has a proximal end 46 and a distal end 55. The proximal end is coupled to the

neck 38 of the rigid interface member 22. Preferably, the neck is pivotably coupled to the rigid arm, thereby allowing the distal end to pivot to a lowest gravitational position. Embodiments are envisioned, however, wherein the rigid arm 45 is secured to the neck 38 in a non-pivoting relationship.

5

The rigid interface member 22 has a planar interface area 23. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom surface of a pad 28 in contact with the tabletop 21. In the embodiment of FIG. 18,  
10 the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87. As discussed in greater detail herein, a purse will hang in a stable orientation from a purse hanger 20 if the distal end 55 of the rigid arm 45 is positioned vertically beneath the planar interface area 23.

15 A flexible member 60 is secured to the distal end 55 through an upper flexible member coupling 61, and to a purse engagement member shown as a rigid loop 70 through a lower flexible member coupling 62. One or more straps 81 of a purse 80 are placed within the rigid loop. The rigid interface member 22 is placed on a table top, and the purse hangs from the table top, suspended by the purse holder. Certain prior art purse holders have suspended a  
20 purse strap from the tip of a metal rod, potentially damaging or even poking a hole in an expensive purse strap. Because the strap rests in a rigid loop, the present invention does not inflict damage to purse straps.

A common inconvenience of prior art purse holders has been that, when stored within  
25 the purse, subsequent use requires searching for the purse holder amidst a purse full of personal items, or abandoning the search and storing the handbag or purse below the table or in a traditional manner. An advantage of the present invention is the flexible member 60. Referring primarily to FIGS. 3 and 4, when the purse hanger is not in use, the flexible member 60 of the present invention allows most of the purse hanger 20 to be stored inside the  
30 purse 80 while the purse engagement member 70 remains secured to a purse strap 81. Because the purse hanger can be easily located in the purse due to its connection to the purse

strap 81, the purse holder is easily located no matter how many personal items are stored in a purse.

### **The Interface Member**

5 Referring primarily to FIGS. 5 and 9-16, the rigid interface member 22 has a flat bottom surface 24 defining the planar interface 23 for resting parallel to a tabletop 21. The planar interface area 23 can be coextensive with the bottom surface 24 of the rigid interface member, as shown in FIG. 2, or can be defined by padding 28 attached to the bottom surface, as shown in FIG. 13 and discussed further below.

10 An alternative embodiment shown in FIG. 18 includes a multi-leg embodiment 25 of a rigid interface member comprising a frame 26 with three legs 87 extending therefrom. The distal ends of the legs individually interface with a tabletop 21, and thereby define a geometric plane which includes the planar interface 23.

15 As best seen in FIGS. 12, 13 and 18, a layer of padding 28 established an optimal frictional contact with a table top 21, and avoids scratching table surfaces. The padding can be formed from a variety of materials, including but not limited to felt, cork, rubber, or other materials. Those skilled in the art will recognize that in embodiments utilizing layer of padding, the planar interface 23 is technically established by the padding, not the rigid  
20 interface member 22 or the distal ends of the legs 87.

According to one embodiment, the rigid interface member 22 releasably couples to a cover 29 by a securement means, shown in FIGS. 5, and 14 as a clasp and hinge assembly.

25 An upper clasp 32 on the cover engages a lower clasp 33 on the rigid interface member to secure the cover in place. When the clasp release 34 is pressed by a user, the clasp assembly releases the cover from the rigid interface member. According to the embodiment shown in FIGS. 9, 10, and 13, an optional hinge 31 prevents the cover from detaching completely from the rigid interface member 22. A hinge can also be used independent of a clasp means. The  
30 hinge assembly 31 can advantageously be used with other mechanical closing devices, such as a two-position rocker-and-spring assembly, wherein, when the cover is below a center

position, the cover is urged shut by the spring, and when lifted above the rocker point, the cover is urged open by the spring.

FIG. 16 shows an alternative embodiment wherein the cover 29 releasably engages the rigid interface member in a threadable engagement. Mutually engageable upper threads 34 and lower threads 35 are respectively formed around the edges of the cover 29 and the rigid interface member 22.

As seen in FIGS. 14 and 16, a storage cavity 30 within the rigid interface member 22 can be used to store personal items, such as lip gloss 41 or other forms of make-up 82, prescription medications 83, a condom, or other small personal items. Consumable personal items such as lip gloss will preferably be stored in a pre-formed container that can be removed and replaced within the storage cavity 30. FIG. 16 shows an alternative embodiment including modular inserts 43 which can be used to segregate storage of separate items, such as different shades of lip gloss or make-up, different prescription medications, etc.

FIG. 5 illustrates an embodiment comprising a timepiece 44 disposed within the storage cavity 30, and a watch stem 27 extending out of the side of the rigid interface member 22. Alternative electrical and mechanical devices such as battery operated timepieces, cameras, or cellular telephones stored within the cavity 30 are envisioned within the scope of the claimed invention. Those skilled in the art will understand that insertion ports for batteries, digital memory, cell-phone ear plugs, and other electro-mechanical accessories can be positioned in a variety of places, such as in the bottom surface 24, the side of the rigid interface member 22, or in the storage cavity 30 as accessed after opening the cover 29. Watches and other electronic and mechanical devices are preferably removable for battery replacement, servicing, or exchanging with other insertable devices and members.

The upper surface of the rigid interface member, seen in FIG. 1, 9 and 19 will preferably be a decorative member. Expensive embodiments can include onyx, lapis lazuli, or other precious or semi-precious stones, as well as porcelain, ceramic, gold, platinum and silver etchings, and other jeweled and decorative surfaces. The decorative surfaces can

include various artistic displays, emblems of college and professional sports teams, casinos, restaurants, inaugurations, sports championships and other commemorative events.

5 A neck 38 extending horizontally from the rigid interface member 22 is discussed in greater detail in conjunction with the rigid arm 45. The neck can be integrally formed with the rigid interface member, or securely attached thereto. The axis of the neck is preferably parallel to the planar interface area 23.

### **The Rigid Arm**

10 The neck 38 couples a rigid arm 45 to the rigid interface member 22.

Referring primarily to FIGS. 2, 5-12 and 14-16, the rigid arm 45 is formed from a rigid material or combination of materials that are strong enough to maintain a preformed shape while supporting the weight of a purse. Materials can include, but not limited to metal, 15 graphite, composite and kevlar compositions or combinations. The rigid arm preferably includes a horizontal extension 50 and a vertical extension 51. Embodiments are envisioned wherein the rigid arm is single piece construction, such as a contiguous wire rod. Alternative embodiments discussed in greater detail below envision a rigid arm having multiple separate members joined by a linking piece, such as a turnbuckle.

20

The proximal end 46 of the rigid arm is located at the tip of the horizontal extension 50, and couples with the neck 38 of the rigid interface member 22. When the rigid arm is coupled with the neck 38, the horizontal extension of the rigid arm is parallel to the planar interface area 23.

25

The distal end 55 of the rigid arm couples with the flexible member 60 through an upper flexible member coupling 61.

30 As discussed above, the engagement between the proximal end 46 of the rigid arm 45 and the neck 38 is preferably a swivelable engagement. FIG. 5 shows a basic swivel engagement that permanently couples the horizontal extension 50 to the neck 38.

FIG. 9 shows a swivel engagement including an inner neck portion 38a extending from the rigid interface member 22 and an outer neck portion 38b coupled with the horizontal extension 50. A release means shown as a ball-detent engagement allows the rigid interface member 22 to be detached from the rigid arm 45. A depressible ball 58 in the inner neck engages a detent opening 59 in the outer neck portion 38b to form a ball-detent engagement. The rigid interface member 22 can be released from the rigid arm 45 by depressing the ball 58 and withdrawing the inner neck 38a from the outer neck 38b.

FIG. 11 shows an alternative swivel embodiment with a release means comprising a threaded engagement between the horizontal extension 50 of the rigid arm 45 and the neck 38. The horizontal extension 50 includes a threaded portion 48 engaged with a threaded interior 42 of the neck 38. The threaded embodiment allows the horizontal extension 50 of the rigid arm 45 to swivel within the neck 38. Although threaded engagements can allow a rigid interface member 22 to be detached from the rigid arm 45, alternative embodiments are envisioned wherein a stop, such as a thread interruption, prevents the complete unscrewing and detachment of the rigid arm from the rigid interface member.

FIG. 15 is an alternative swivelable embodiment having an enlargement shown as a rounded boss 47 formed on the proximal end of the rigid arm, and secured within the neck by a constriction shown as a choke flange 37 within the neck 38.

The specific embodiments of swivelable and releasable engagements of the rigid arm 45 and the rigid interface member 22, as described above, however, are exemplary, and are not intended to limit other swivel engagements that are fully intended within the scope of the claims, including detachable and non-detachable swivel engagements. Additionally, non-swivelable embodiments are envisioned wherein the rigid arm 45 is engaged to the neck 38 in a non-swiveling relationship.

As shown in FIGS. 1, 2, 5, 12, 14 and 16, rigid arm embodiments 45 can include a vertical extension 51 perpendicular to the horizontal extension 50. A lengthening means on

the vertical extension 51, shown as a turnbuckle 49, allows adjustment of the vertical distance between the planar interface area 23 and the distal end 55 of the rigid arm 45. A vertical lengthening means allows the purse hanger 20 to be adjusted according to the thickness of the table, bar, or other horizontal surface from which a purse may be hung. By positioning the  
5 lengthening means on a vertical extension 51, the act of lengthening or shortening the vertical extension will not move the distal end 55 out of the center axis.

FIGS. 7 and 8 show an enlarged view of a lengthening means in the form of a threaded turnbuckle 49 coupling an upper member 56 and a lower member 57 of the vertical extension.  
10 According to one embodiment, the turnbuckle can be completely unscrewed from at least one of the upper and lower members 56, 57, thereby allowing the user to combine a different flexible member 60 with the purse hanger assembly. An alternative embodiment, however, envisions stops such as enlarged unthreaded portions on the upper and lower members 56, 57 that prevent detachment of the upper and lower members from the turnbuckle.

15

FIG. 19 illustrates alternative embodiment with a rigid arm 45 defined by a large progressive curve. The shape of the rigid arms in the figures are exemplary, and other alternative shapes are envisioned. The rigid arm can be formed from multiple members, such as two rods and a turnbuckle as shown in FIG. 16, or from single piece construction as shown  
20 in FIG. 19.

### The Stable Region

As best seen in FIGS. 12, 13 and 18, the stable region 69 is the region vertically beneath the planar interface area 23. When a purse 80 is suspended by a purse hanger 20 supported by a flat surface 21, and the distal end 55 of the rigid arm 45 is within the stable  
25 region, the sum of the moments acting on the rigid interface member will be zero, allowing a purse hanger to remain in a stable orientation. In swivel embodiments, the rigid arm will be urged by gravity to pivot until the distal end 55 passes into the stable region. In non-swiveling embodiments, the distal end will be fixedly disposed within the stable region.

30



As noted above, the planar interface area 23 depends on the shape and arrangement of the member or members in physical contact with the tabletop. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom surface of a felt, rubber or cork pad 28 in contact with the tabletop 21. In the multi-leg embodiment 25 of FIG. 18, the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87.

As best seen in FIG. 12, the stable region 69 vertically beneath the planar interface area 23 is largest when the planar interface area is horizontal. When the rigid interface member is swiveled to a non-horizontal orientation, the stable region 69 collapses in size.

The weight of a purse will naturally cause some flexure of a rigid arm, and can alter the horizontal position of the distal end 55. If bending or flexure were to move the distal end out of the stable region 69 during use, the purse hanger would become unstable. FIGS. 1, 2 and 19 show a purse hanger 20 designed, when a purse of a predetermined weight is supported by the purse hanger, the distal end 55 is aligned along the center axis 68 that intersects the geometric center 67 of the planar interface area 23 at right angles. According to this design, minor flexure of the rigid arm or minor manufacturing variations will not move the distal end 55 outside of the stable region 69 or otherwise degrade the stability or usefulness of the purse hanger. In swiveling embodiments, the arc defined by the distal end 55 will pass through the center axis 68. In non-swiveling embodiments, the distal end 55 of the rigid arm should be fixedly disposed in vertical alignment beneath the planar interface area 23 when the planar interface area is horizontal.

### **The Flexible Member**

As best shown in FIGS. 1-5 and 16, a flexible member 60 has a first end with an upper flexible member coupling 61 for coupling with the distal end 55 of rigid arm 45, and a second end with a lower flexible member coupling 62 for coupling with the purse engagement loop 70. The flexible member can be formed from any material or combination of materials that is sufficiently flexible to allow the purse hanger 20 to be stored in a purse 80 without detaching

the purse engagement loop 70 from the purse strap, and strong enough to reliably hold a purse in a suspended position. The opening in the purse can be substantially closed with the flexible member protruding through a small opening. Because part of the flexible member will remain outside the purse, the user can easily pull the remainder of the purse hanger out of the purse for use. According to a preferred embodiment, the flexible member will be between one inch and four inches in length. The appended claims, however, comprehend embodiments having a flexible member less than one inch or greater than four inches.

When a purse 80 hangs from a purse hanger as in FIG. 1, an impact against the purse 80, such as might be imparted from a knee or chair, can impart a torque to the purse which can be transmitted to the interface member 22, dislodging it from the tabletop 21. Such torque, however, can be dissipated by allowing the purse to spin when impacted by a knee or chair. The flexible member 60, therefore, should include at least one swivel member. FIG. 5 shows a purse hanger with a swivel engagement in the upper flex coupling 61, and a flexible member 60 in the form of a swivel ball chain. FIG. 2 shows a purse hanger with swivel engagements for the upper flex coupling 61 and the lower flexible coupling 62, as well as a swivel ball chain for the flexible member. FIG. 6 is an enlarged view of a swivel ball chain that can detachably connect to the upper flexible member coupling 61.

FIG. 16 and cross sectional view 16A show a non swiveling flexible member 60 comprising a flexible high strength tensile core 65 surrounded by decorative external layering, shown as gold braid 64. High strength tensile members can include, but are not limited to steel or other wire rope, nylon, spun glass, carbon kevlar, as well as composites that are not yet developed. External decorative layering can include, but is not limited to, gold, silver or platinum chain or braid, as well as other jewelry. FIG. 17 shows pearls 66 strung on a high tensile strength core 65. Because a high tensile strength core such as steel rope will impart torque when twisted, and will not release the torque through swiveling, embodiments comprising a non-swiveling flexible member such as FIGS. 16 and 17 comprise non-swivelable flexible members 60 connected with swivelable upper flexible member coupling 61 and lower flexible member coupling 62.

### The Purse Engagement Loop

FIGS. 1-4 show a purse engagement loop 70 for holding the handle, or handles 81 of a purse 80. Referring to FIGS. 2 and 5, a purse engagement loop 70 is a rigid member having a primary loop member 71 and a movable loop member in the form of a hinged member 72 that is hingably secured to the primary loop member. The hinged member 72 can move between first and second positions relative to the primary loop member. A spring member urges the movable loop to the first position. When the movable loop member is moved from the first position to the second position relative to the primary loop member, the loop 70 is an open loop, and one or both purse straps 81, can be inserted through the opening and placed into the loop. When the hinged member 72 is restored to the first position, the loop 70 becomes a closed loop, securely holding the purse strap(s) inside the loop.

According to the embodiment of FIG. 2, the movable loop member 72 is attached to the primary loop member 71 by a hinge 74, and moves between the first and second positions in a swivel motion. A spring 73 exerts a force between the primary loop member and the hinged member 72 to urge the hinged member to swivel to the closed position.

The embodiment of FIG. 5 shows a primary loop member having a tubular construction 76, and a movable loop member in the form of a slidable member 75 that can slidably retract into the tubular construction. A helical spring 78 is positioned within the tubular construction to urge the slidable member 75 into a closed position. A finger tab 77 on the slidable member provides a means for a user to retract the slidable member.

An alternative embodiment for purse engagement loop 70, seen in FIG. 1, comprises a continuous loop without any movable member. During fabrication of a purse, a purse handle 81, or multiple handles, as in FIG. 1 are inserted through the continuous rigid loop 70. The purse handle is then fixed to the purse 80 in a manner known in purse construction. The purse hanger 20 is thereby permanently or semi-permanently affixed to the purse handle.

The present invention is directed to a purse hanger for hanging a purse from a table or other horizontal surfaces. The purse hanger has a flexible member allowing the rigid

interface member of the purse hanger to be stored in the purse without detaching the purse engagement member 70 from a purse strap. Many features that would be readily understood to one skilled in the art have not been discussed so as to not needlessly obscure important features of the claimed invention. At the same time, many specific details included herein are  
5 descriptive of particular embodiments, but are not essential to every embodiment comprehended by the appended claims. Accordingly, these details should not be construed to limit the scope of the claims appended hereto. It will be apparent to those skilled in the art that many modifications, alternatives and equivalent embodiments are possible without departing from the spirit and scope of the invention set forth in the appended claims.

## CLAIMS

### I Claim:

- 1 1. A purse hanger for hanging a purse from a flat surface comprising:
  - 2 a) a rigid interface member defining a planar interface area;
  - 3 b) a rigid arm with a proximal end coupled with the rigid interface member and a  
4 distal end;
  - 5 c) a flexible member with a first end coupled to the distal end of the rigid arm,  
6 and a second end coupled to a purse engagement member.
- 1 2. The purse hanger according to claim 1 wherein the planar interface area is  
2 substantially co-planar with said flat surface, and wherein said distal end of said rigid  
3 arm is oriented vertically beneath said planar interface area.  
4
- 5 3. The purse hanger according to claim 1 further comprising a purse with a purse strap  
6 engaged with said purse engagement member.
- 1 4. The purse hanger according to claim 1 wherein the rigid arm is swivelably coupled  
2 with the rigid interface member.
- 1 5. The purse hanger according to claim 1 wherein the rigid arm is detachably coupled  
2 with the rigid interface member.
- 1 6. The purse hanger according to claim 1 wherein the rigid interface member has a  
2 storage cavity.
- 1 7. The purse hanger according to claim 6 further comprising storage members stored in  
2 said storage cavity, said storage members being selected from among a group  
3 consisting of lip gloss, foundation, make up, vitamins, drugs, a condom, modular  
4 inserts, a timepiece, a cellular telephone, a camera and combinations thereof.

- 1    8.    The purse hanger according to claim 6 further comprising a cover for covering said  
2       storage cavity, and securement means for securing said cover to said rigid interface  
3       member.
- 1    9.    The purse hanger according to claim 8 wherein said securement means is selected  
2       from among a group consisting of snaps, clasps, hooks, hinges, magnets, threaded  
3       members, and combinations thereof.
- 1    10.   The purse hanger according to claim 1 wherein said rigid arm comprises a horizontal  
2       extension parallel with said planar interface area.
- 1    11.   The purse hanger according to claim 10 wherein the rigid arm comprises a vertical  
2       extension that is about perpendicular to said horizontal extension.
- 1    12.   The purse hanger according to claim 11 wherein the vertical extension has a  
2       lengthening means for altering a length of the vertical extension.
- 1    13.   The purse hanger according to claim 1 wherein the first end of the flexible member is  
2       coupled to the distal end of the rigid arm by a swivel joint.
- 1    14.   The purse hanger according to claim 1 wherein the second end of the flexible member  
2       is coupled to the purse engagement member by a swivel joint.
- 1    15.   The purse hanger according to claim 1 wherein the purse engagement member is a  
2       rigid loop.
- 1    16.   The purse hanger according to claim 15 wherein the rigid loop is a single continuous  
2       loop.
- 1    17.   The purse hanger according to claim 15 wherein the rigid loop is a formed from a  
2       movable loop member movably engaged to a primary loop member, wherein, when

1       the movable loop member is in a first position, the rigid loop is a closed loop, and  
2       when the movable loop member is in a second position, the rigid loop is an open loop.

1    18.   The purse hanger according to claim 17 wherein the movable loop member is movably  
2       engaged to the primary loop member through a pivot means.

1    19.   The purse hanger according to claim 17 wherein the movable loop member is slidably  
2       engaged to the primary loop member through a slide means.

1    20.   The purse hanger according to claim 19 wherein said slide means includes a tubular  
2       member into which the movable loop member can retract.

1    21.   The purse hanger according to claim 17 further comprising a spring member for  
2       urging said movable loop member toward said first position.

1    22.   A purse hanger for hanging a purse from a horizontal surface comprising:  
2       a)    a rigid interface member with a planar interface area resting on said horizontal  
3            surface;  
4       b)    a rigid arm with a proximal end coupled to said interface member and a distal  
5            end disposed vertically beneath said planar interface area;  
6       c).   a flexible member with first and second ends, said first end of said flexible  
7            member secured to said distal end of said rigid arm;  
8       d)    a purse engagement member coupled with said second end of said flexible  
9            member.

1    23.   The purse hanger of claim 22 wherein the flexible member is at least one inch long.

1    24.   The purse hanger of claim 22 wherein said purse engagement member is a rigid loop.

1    25.   The purse hanger of claim 24 wherein the rigid loop comprises a primary loop  
2       member coupled to a movable loop member, said movable loop member being

1       movable between first and second positions, wherein, in said first position, said rigid  
2       loop is a closed loop, and in said second position, said rigid loop is an open loop.

1   26.   The purse hanger of claim 25 further comprising a spring member engaged with said  
2       primary loop member and with said movable loop member to urge said movable loop  
3       member to said first position.

1   27.   The purse hanger according to claim 22 wherein said rigid arm has a lengthening  
2       means.

1   28.   The purse hanger according to claim 27 wherein said lengthening means comprises a  
2       turnbuckle.

1   29.   The purse hanger according to claim 22 further comprising a storage cavity within said  
2       rigid interface member.

1   30.   The purse hanger according to claim 29 further comprising a cover for covering said  
2       storage cavity, and a cover engagement means for engaging said cover to said rigid  
3       interface member.

1   31.   The purse hanger of claim 30 wherein the cover engagement means is selected from  
2       among a group consisting of hinges, clasps, threaded members, chains, clips, and  
3       combinations thereof.

1   32.   The purse hanger according to claim 29 further comprising storage members stored  
2       within said storage cavity, said storage members selected from among a group  
3       consisting of lip gloss, foundation, modular dividers, vitamins, prescription  
4       medication, a condom, a cell phone, a time piece, a camera, and combinations thereof.

1   33.   A method for storing a purse hanger having a rigid arm with a proximal end extending  
2       from a rigid interface member and a distal end secured to a first end of a flexible



3 member, a second end of said flexible member having a purse engagement member  
4 secured to a strap of a purse, the method comprising the steps:  
5 a) opening the purse;  
6 b) flexing said flexible member; and,  
7 c) placing said rigid interface member within said purse, wherein said purse engagement  
8 member remains secured to said purse strap.

1 34. The method of claim 33 further comprising the step of substantially closing said purse,  
2 wherein said flexible member protrudes through a small opening in said purse.

## ABSTRACT OF THE DISCLOSURE

A purse hanger for hanging a purse from a flat surface has a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface during use.

- 5 A rigid arm has a proximal end swivelably coupled with the rigid interface member and a distal end, which, in use, is oriented by gravity to a position vertically beneath the planar interface area. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member such as a rigid loop securing the purse strap. The flexible member allows the rigid interface member to be stored in the purse
- 10 while the purse engagement member remains secured to the purse strap. The rigid interface member can have a storage cavity for storing personal items.

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

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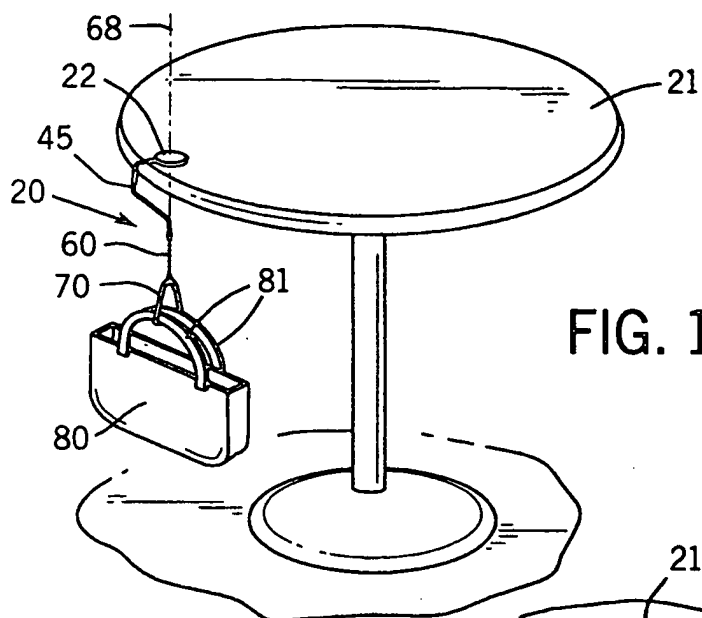


FIG. 1

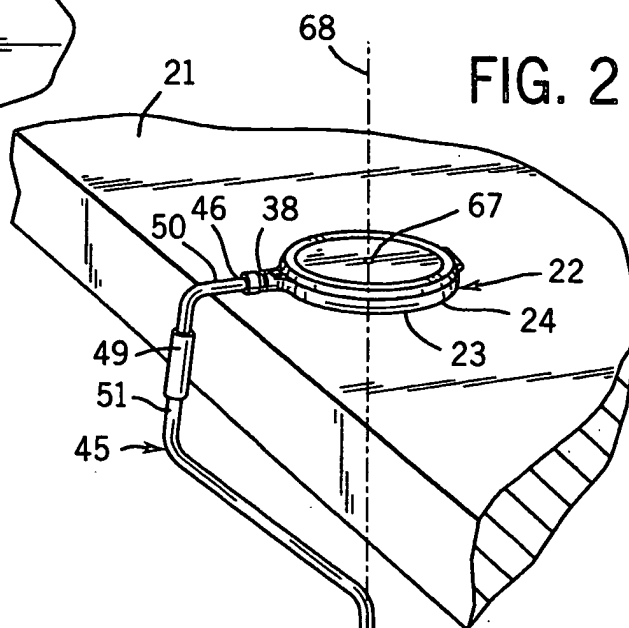


FIG. 2

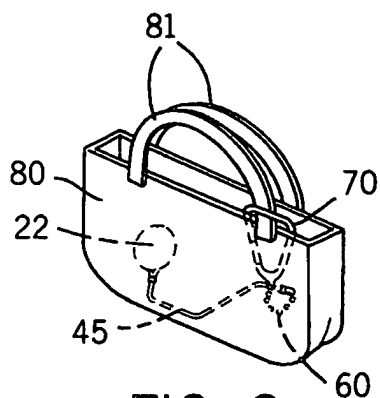


FIG. 3

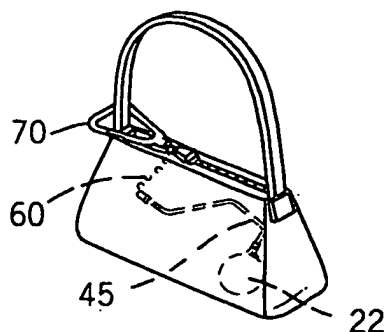
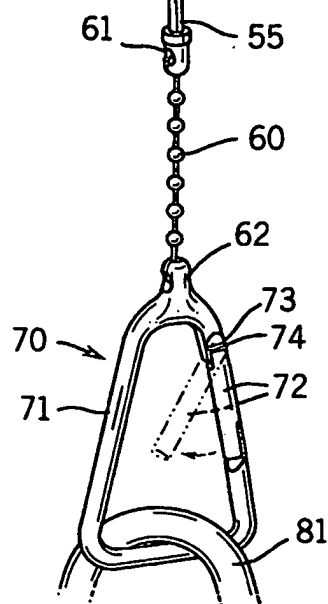
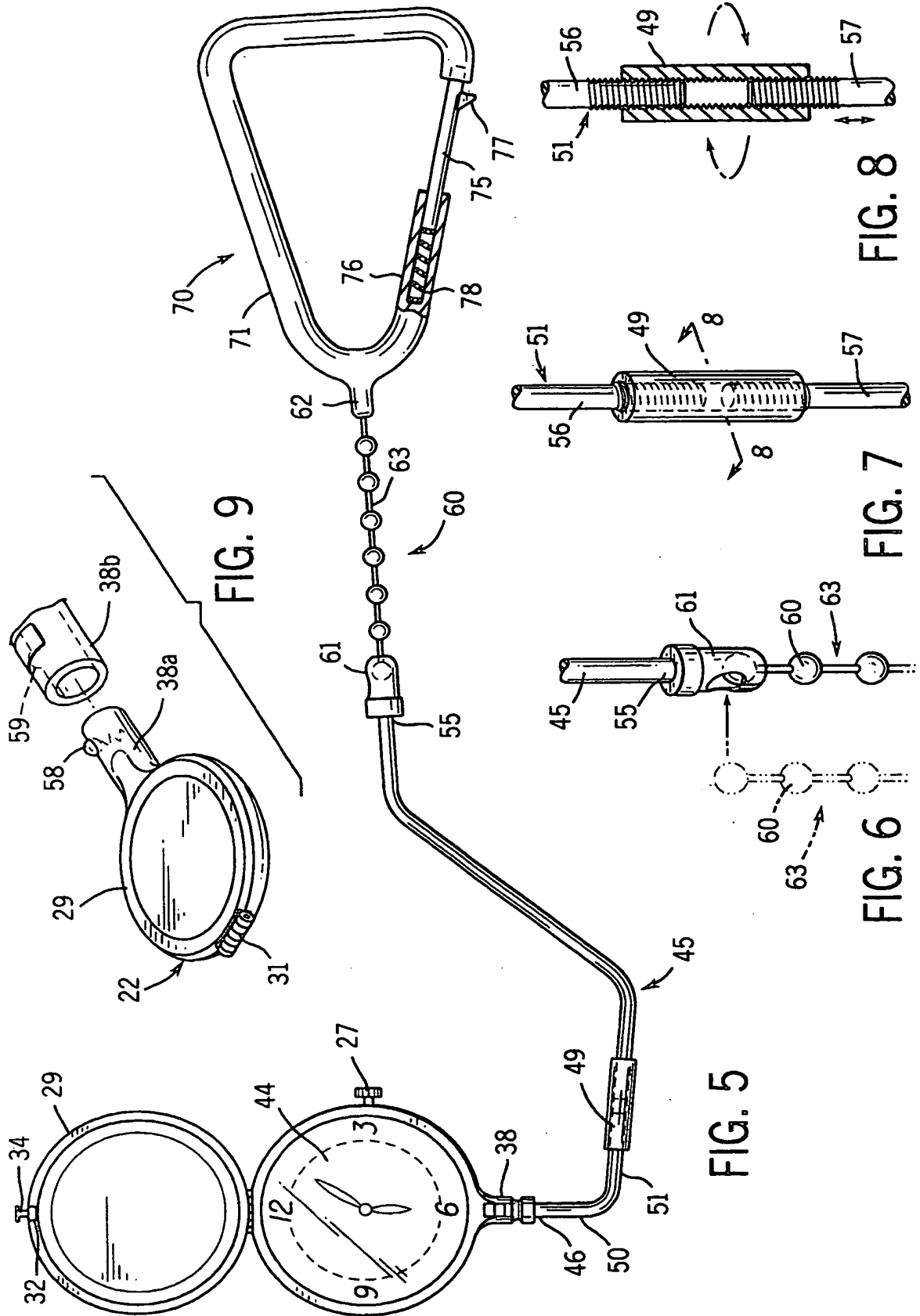


FIG. 4



PURSE HANGER  
SHELLY LENNA BAUERLY  
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PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

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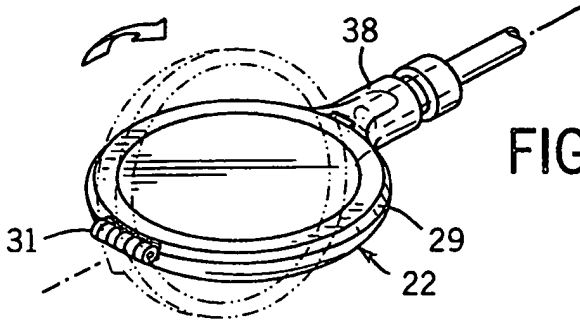


FIG. 10

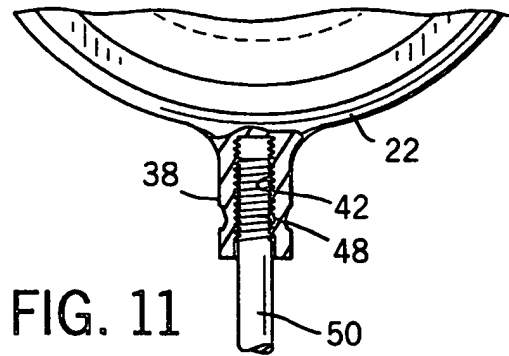


FIG. 11

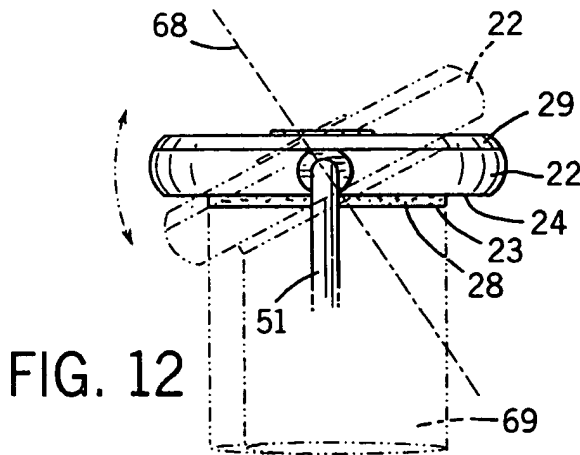


FIG. 12

FIG. 13

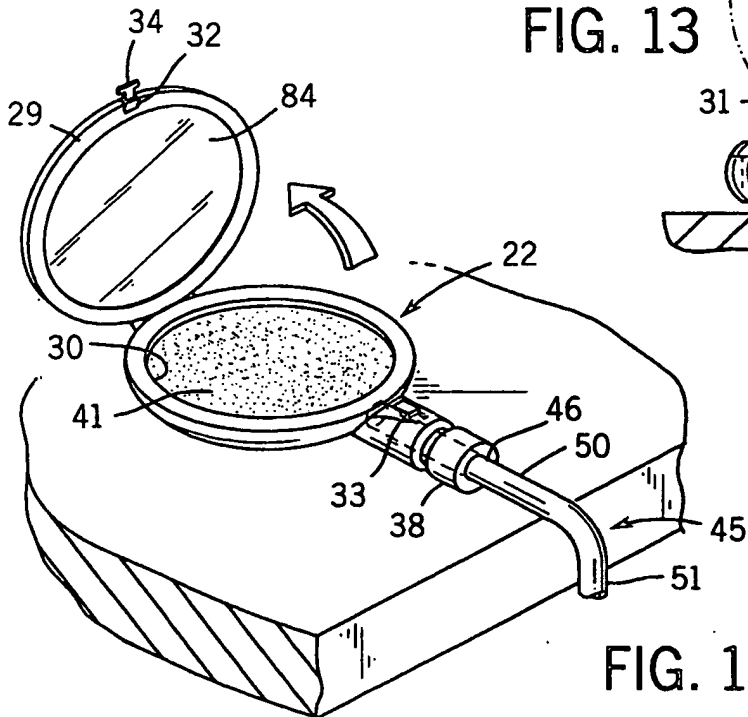
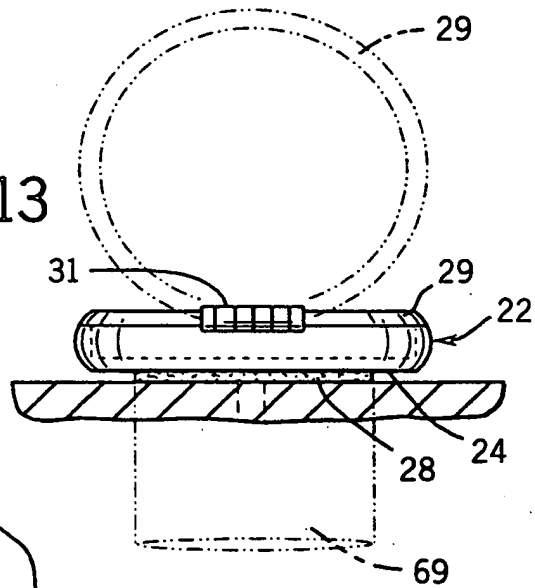


FIG. 14

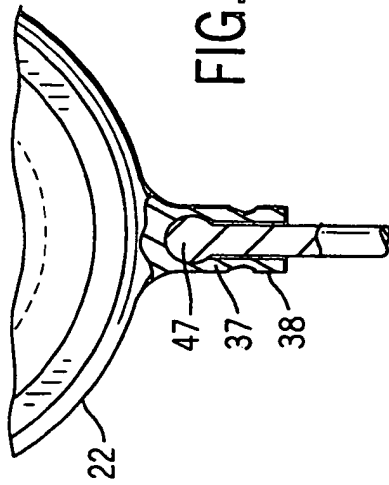


FIG. 15

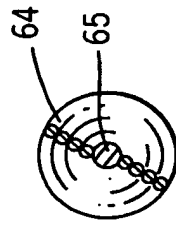


FIG. 16A

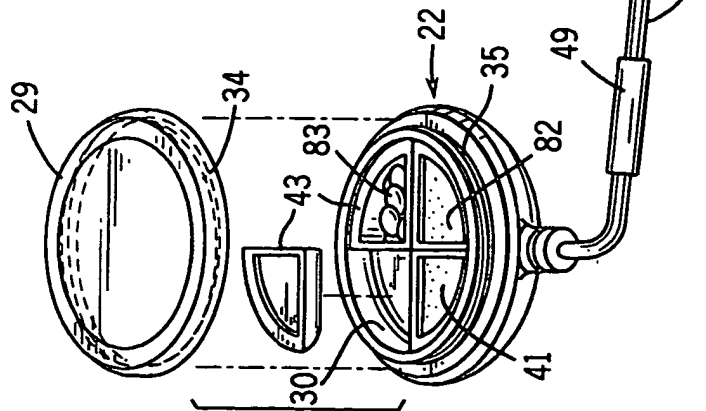


FIG. 16

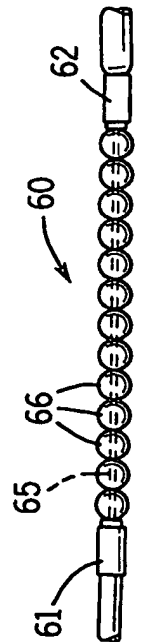
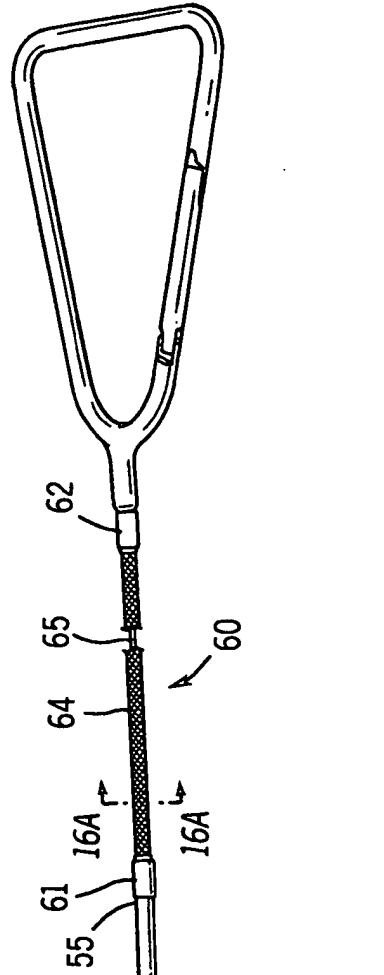


FIG. 17

PURSE HANGER  
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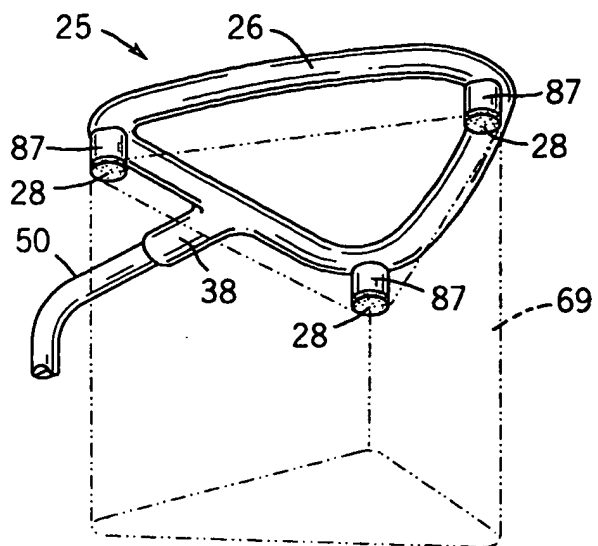


FIG. 18

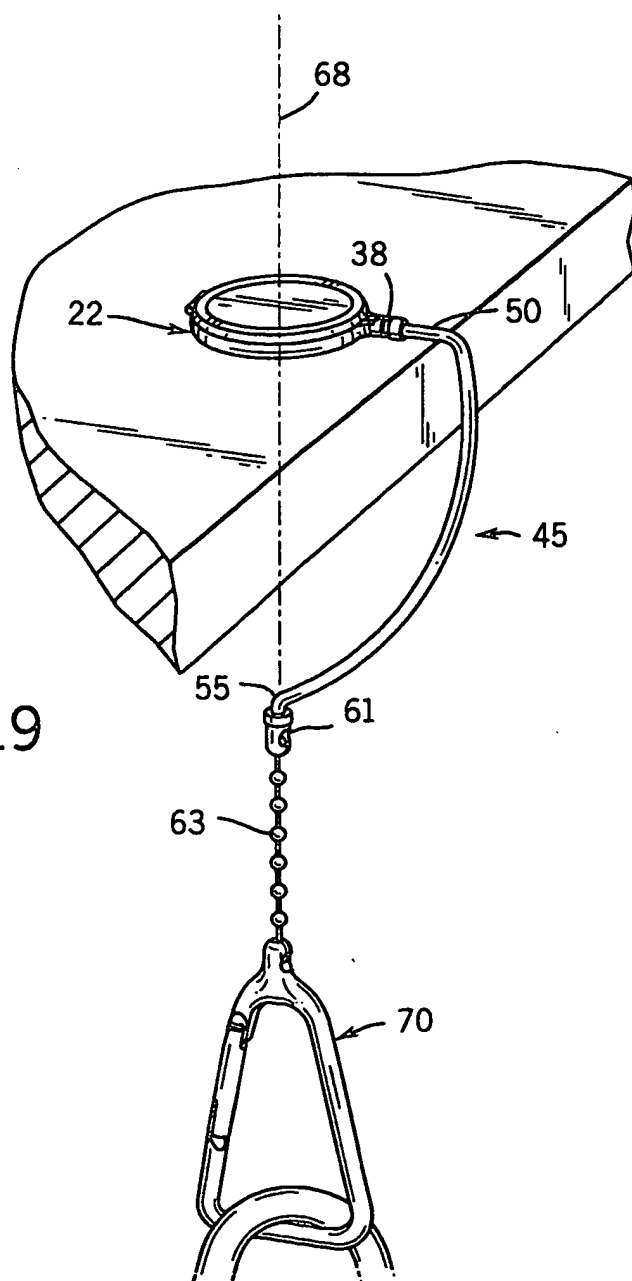


FIG. 19



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,426	01/23/2004	Shelly Lenna Bauerly	Bauerly 00100	6800
66842	7590	01/10/2008		
Law Office of Ronald Shea 2540 Country Hills Rd Apt. 192 Brea, CA 92821			EXAMINER LE, TAN	
			ART UNIT 3632	PAPER NUMBER
			MAIL DATE 01/10/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,426		BAUERLY, SHELLY LENNA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tan Le		3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-32,35-39 and 41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9,19,20,29-32,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28,37-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

Applicant's reply filed 10/11/07 is acknowledged. Claims 1-2, 4-32, 35-39 and 41 are currently pending. Claims 3, 33-34 and 40 had been canceled. Claims 5-9, 19-20, 29-32 and 35-36 had been withdrawn.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25, 37-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1 and 22, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising a rigid interface member defining a planar interface area (12); a rigid arm with a proximal segment terminating at proximal end 19, a distal segment 20, 21, 22, 23, 15) terminating at distal end 21, 22, 23, 15, a centrally extension ( a bend or curve between 13 and 20) disposed between proximal segment and a distal segment. wherein the proximal end is coupled with the rigid interface member, the proximal end being in a orientation substantially parallel to the planar interface area and curving into the central extension, and wherein the central extension curves into the distal segment which extends vertically downward (20) from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as

segment (21, 22, 23, 15 upon which a handbag, purse or the like can be supported or secured).

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end (at the v-shaped) of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop; and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

AS to claims 37-38, claims 37-38 recited limitations similar to claims 1 and 22, except that the central extension in this case is element 20.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical

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Art Unit: 3632

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extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

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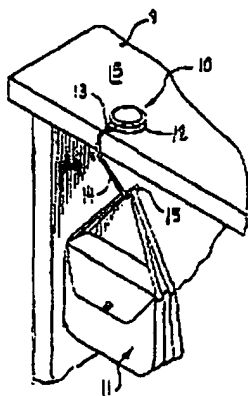


FIG. 1.

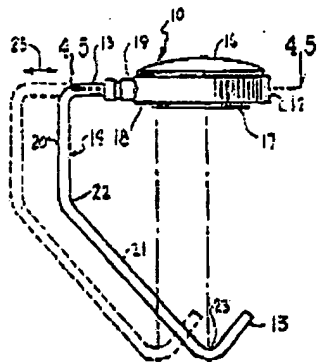


FIG. 2.

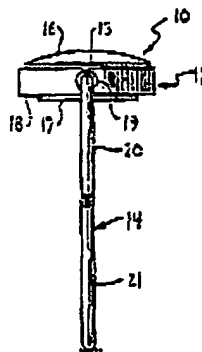


FIG. 3.

***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 10/11/07 have been fully considered but they are not persuasive.

The crux of the arguments are: "neither Lurie nor Omura disclose or suggest "the central extension curves downward to form the distal segment that extends vertically downward" and "neither Lurie or Omura disclose or suggest an apparatus wherein the distal ends is, or even can be positioned vertically beneath the planar interface area." (page 10) This is not deemed to be persuasive. As stated in the rejection above, Lurie teaches the central extension curve (between elements 13 and 20) and the distal segment 20 that extends vertically downward. Lurie also teaches the distal end 22, 21, 23, 25 and the distal end positioned vertically (at point 23) beneath the planar interface area.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran.

Applicant's argument appears to be attacking individual reference while the rejection is based on the combination. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.



In the instant case, Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. In addition, Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. The combination of Lurie and Omura and Sheeran would have suggest the subject matter of claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number:  
10/763,426  
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Page 10


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. .


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818.

The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
AMY J. STERLING  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600

Tan le   
January 3, 2008.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,426

01/23/2004

Shelly Lenna Baucry

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6800

66842 7590 09/28/2007  
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EXAMINER

LE, TAN

ART UNIT

PAPER NUMBER

3632

MAIL DATE

DELIVERY MODE

09/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,426		BAUERLY, SHELLY LENNA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tan Le		3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-32 and 35-41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9, 19, 20, 29-32, 35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28 and 37-41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/07 and 7/28/07 have been entered.

Claims 1-2, 4-32, 35-41 are currently pending. Claims 3 and 33-34 have been canceled. Claims 5-9, 19-20, 29-32 and 35-36 were withdrawn.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1, 22, 37 and 40, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising the limitations as follows: a rigid interface member defining a planar interface area (12); a rigid arm (14, Fig. 1) with a centrally extension disposed between proximal end and a

distal end (the central extension which has at least one bend in a direction different from the proximal end and in a direction different from proximal end), wherein the proximal end is coupled with the rigid interface member in a orientation substantially parallel to the planar interface area, and wherein the distal end extends downward from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as a hook segment (V-shaped) 23, 15 upon which a handbag, purse or the like can be supported or secured.

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop;

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and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

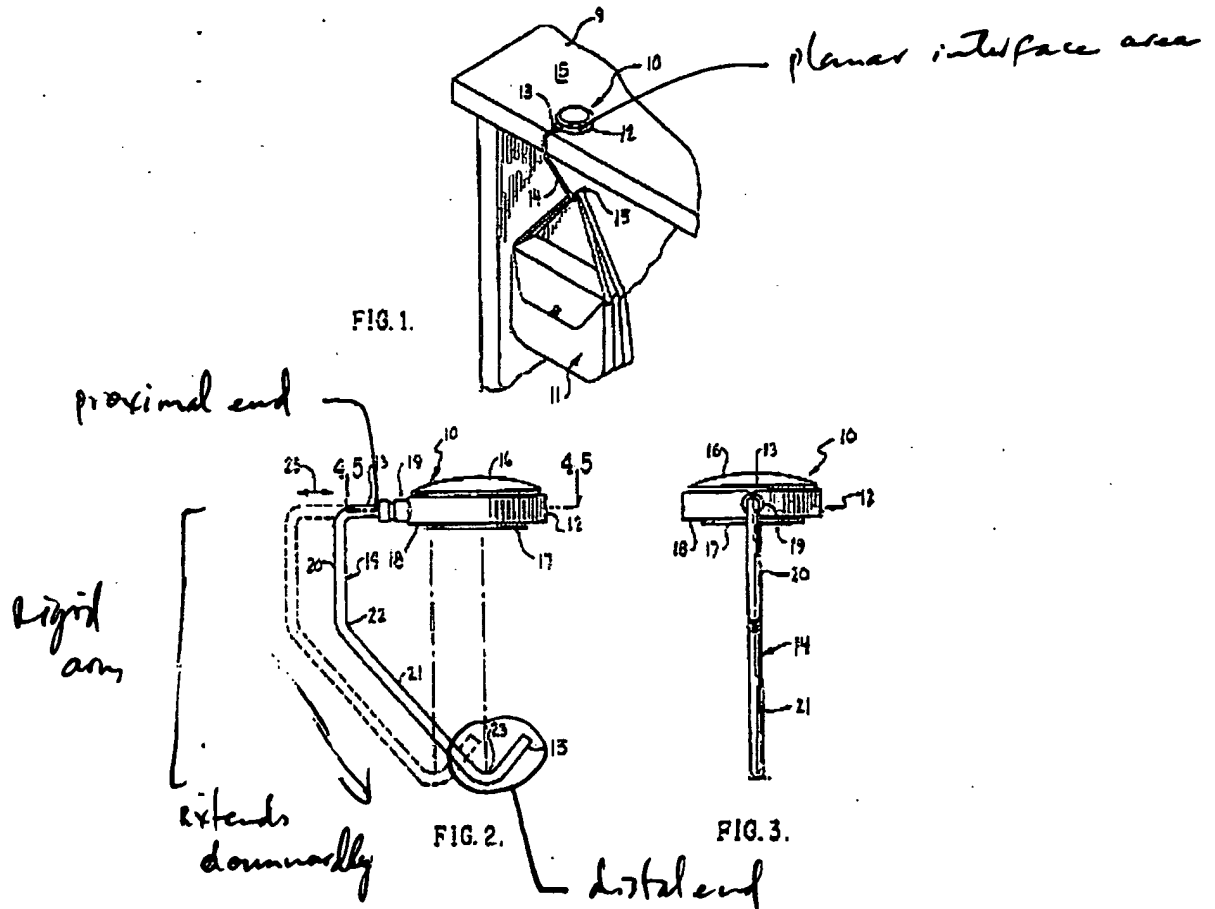
Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical



extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

L72



***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 7/28/07 have been fully considered but they are not persuasive.

Regarding Applicant's argument that neither Lurie nor Omura disclose or suggest "a rigid arm with a proximal end coupled with the rigid interface member in an orientation substantially parallel to the planar interface area, and wherein the distal end extends' downward from the central extension when the distal end is' positioned vertically beneath the planar interface area." "The rigid arm of Lurie bends at an upward angle, and Omura does not disclose or suggest an embodiment wherein the rigid arm locates beneath the planar interface area. Therefore, even if Omura and Lurie could somehow be combined in a manner suggested by the Examiner", this is not found persuasive. As stated in the rejection, Lurie alone clearly teaches substantially all the limitations with the distal end extends downward from the central extension. The examiner considers the "V-shaped portion" (see attached figure) at the end of the rigid arm is the distal end, which considers positioned vertically said planar interface area, whereas the V-shaped distal end portion function as a hook or securement member.

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Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. Therefore, the rejection of these claims is still maintained.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran, Applicant's argument as indicated on page 12 of the Remarks appears to be not directed to what the rejection has been set forth. Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. It should be noted that there is no requirement for a secondary reference to meet every limitation of the claim before it can be utilized. It should also be noted one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In the instant case, the combination of Lurie and Omura and Sheeran would have suggest the subject matter of independent claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.


**Conclusion**

**THIS ACTION IS made NON FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818. The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Tan Le  
September 22, 2007.

  
Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600

(12) UK Patent Application (19) GB (11) 2 253 998 (13) A

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(33) US

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(51) INT CL<sup>6</sup>  
A47B 97/00, A47G 25/08

(52) UK CL (Edition K)  
A4L LAL L1002 L120 L305 L704

(56) Documents cited  
GB 1290629 A

(58) Field of search  
UK CL (Edition K) A4L LAH LAL LBBA  
INT CL<sup>6</sup> A47B, A47G

(54) Hanger device

(57) A hanger device for supporting handbags, purses, umbrellas and the like from a table top or counter comprises a housing 12 to be supported upon a table top or counter. An elongated support shaft 13 is slidably disposed within the housing in parallel spaced relation to the table top or counter. The support shaft depends downwardly from the plane of the housing into a support arm 14, the support arm being deflected into a hook 15. The upper edge of the hook is disposed beneath the housing at a position determined by the slidable relationship between the support shaft and the housing.

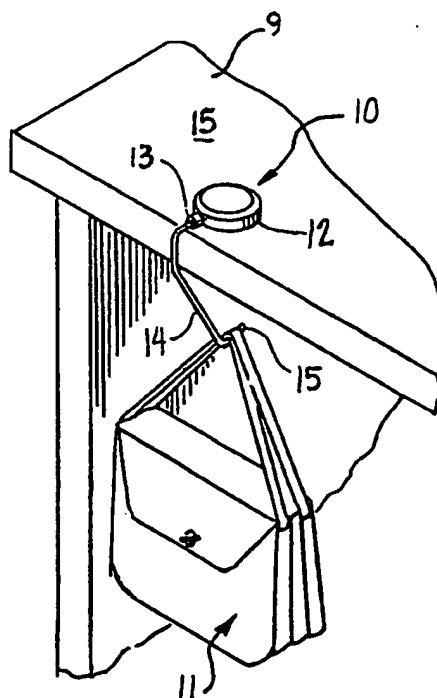


FIG. 1.

FIG. 1.

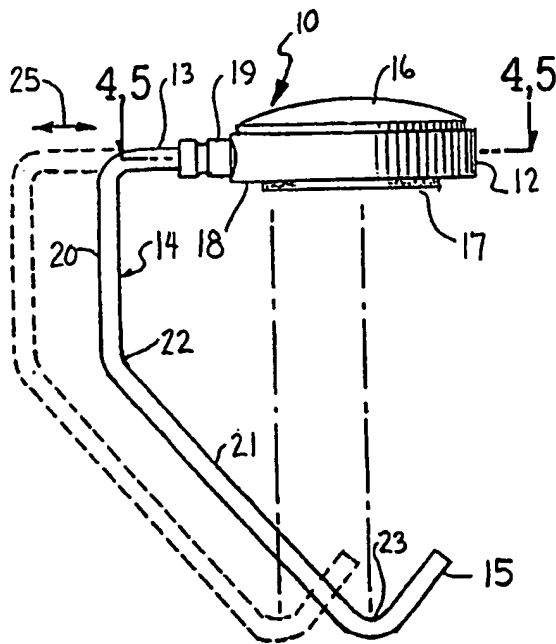
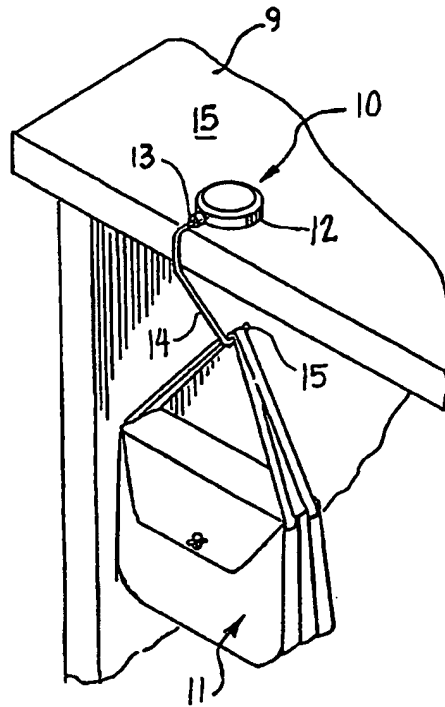


FIG. 2.

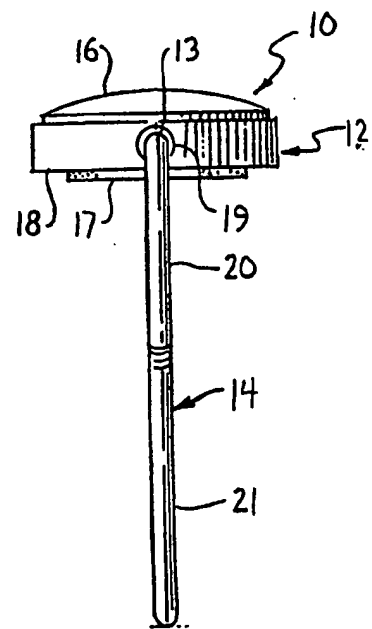


FIG. 3.

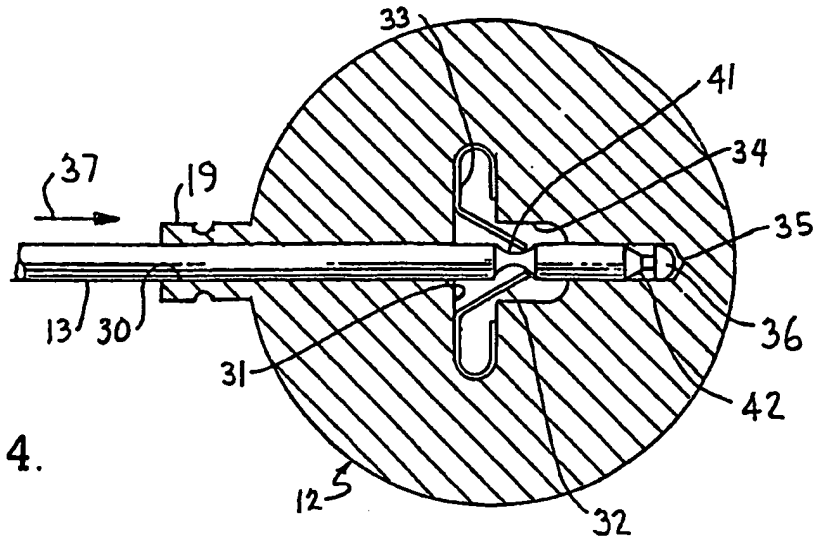


FIG. 4.

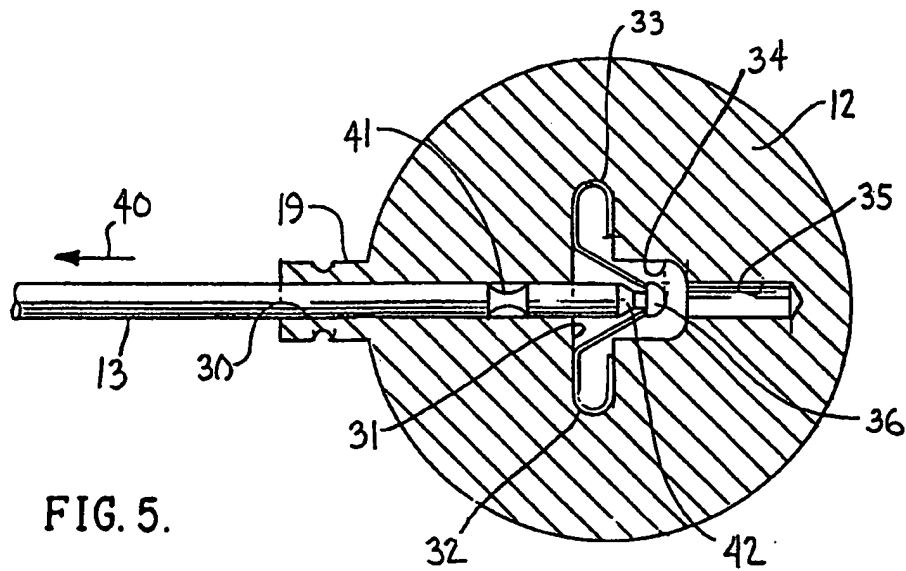


FIG. 5.

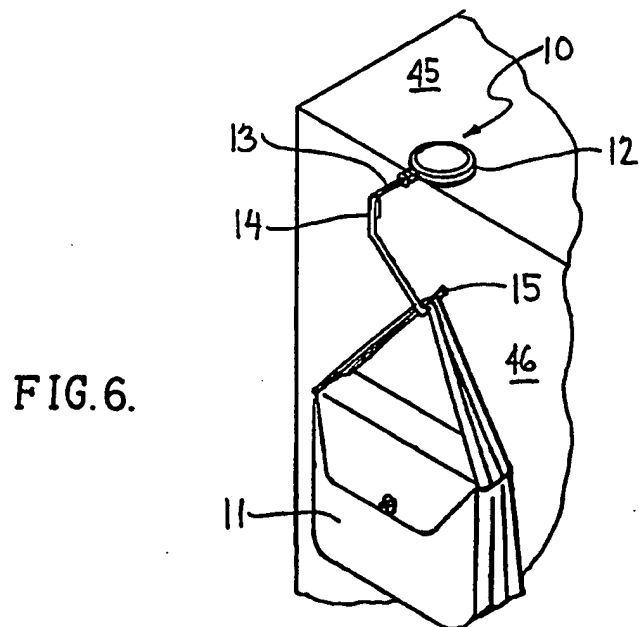


FIG. 6.



- 1 -

HANGER DEVICE

The present invention generally relates to supporting devices and more particularly to devices for use in hanging handbags, umbrellas and the like from tables and counter tops.

There has long been a problem experienced by persons who are carry handbags, umbrellas or other small parcels when dining, attending meetings or at other occasions where it is necessary to maintain possession of the item. The most apparent problem arises when men or women are dining in restaurants and are required by prudence to maintain purses or handbags in close proximity while dining. By necessity, the individual must usually place the handbag, purse or parcel on his or her lap, on a separate chair, on the table or on the floor. When the lack of space prevents convenient placement of the parcel, an individual is often forced to place the object on the floor thereby putting it in contact with dirt and subjecting it to theft.

A number of devices are taught by the prior art which seek to solve the problem addressed by the present invention. Examples of these devices are disclosed in United States Patent Nos. 4,194,714, 2,532,255 and 2,473,086. All of the devices taught by the prior art exhibit a similar problem which

is resolved by the present invention. The device taught in the '714 patent comprises a hanger for a purse having an elongated first arm, one end thereof to be placed on a table top, a second arm being hinged at an end of the first arm and being adapted to support the purse thereon. There is a fixed relationship between the arm which is supported by the table and the location which the purse, bag or parcel is supported. In the '255 patent, a substantially cylindrical housing is adapted for placement upon a table top or counter and includes a downwardly depending hook for support of the purse. Although the hook is provided with the ability to swing with respect to the housing, there is no ability to laterally displace the hook with respect to the supporting housing. The '086 patent comprises a structure which is substantially similar to that shown in the '255 patent. While providing the ability of the supporting hook to swing relative to a supporting plate, there is no ability to laterally displace the hook with reference to the supporting hook.

The devices taught by the prior art all exhibit an inherent problem which is resolved by the present invention. Irrespective of whether the supporting arm or hook can be swiveled or pivoted with respect to the supporting plate or housing, the inability to laterally displace the elements with reference to each other limits use of the devices to table tops or other surfaces having access beneath same. As an example, the

devices taught by the prior art cannot support a handbag or purse from a counter top which includes an adjacent, fixed vertical surface.

The present invention resolves those problems inherent in the designs in the devices taught by the prior art. A supporting housing is adapted to be placed upon the horizontal surface of a table top or counter. A supporting shaft horizontally extends from the housing and is in a slidable relationship therewith. The supporting shaft depends downwardly into a supporting arm and hook which is used to hold the handbag, purse or the like. By altering the position of the supporting shaft relative to the housing, the point upon which the handbag or purse is supported can be laterally displaced relative to the supporting housing. By fully displacing the supporting arm relative to the housing, the present invention provides the ability to hang a handbag, purse or the like from a counter or table top even where there is no spacial access beneath the counter or table top.

The present invention comprises a hanger device for hanging a handbag, purse or the like from a counter or table top. A cylindrical housing is adapted for secure placement upon the counter or table top. A supporting shaft is slidably disposed within the housing and extends therefrom in the plane of the housing. The supporting shaft is coupled within the housing to provide for a plurality of fixed positions. The supporting shaft

is slidably disposed within a positioning channel, the shaft including a predetermined number of selectable positions formed by tapered sections of reduced diameter along the supporting shaft. Resilient leaf springs are disposed on opposite sides of the supporting shaft within the housing. The springs are adapted to resiliently bear upon the shaft and secure supporting shaft at selected positions when in contact with the tapered sections. The portion of the supporting shaft extending from the housing depends downwardly into a supporting arm and hook from which a handbag, purse or the like can be hung. By slidably changing the position of the supporting shaft relative to the housing, the supporting hook can be laterally displaced relative to the housing.

It is therefore an object of the present invention to provide an improved hanger device for supporting handbags, purses and the like from a counter or table top.

It is another object of the present invention to provide a hanger device which can be used with counters or table tops having no special access beneath same.

It is still another object of the present invention to provide a hanger device for purposes, handbags and the like which can be easily stored.

It is still yet another object of the present invention to provide an improved hanger device which is simple and inexpensive to fabricate.

The novel features which are believed to be characteristic of the invention, both as to its organization and method of operation, together with further objectives and advantages thereof, will be better understood from the following description considered in connection with the accompanying drawing in which a presently preferred embodiment of the invention is illustrated by way of example. It is to be expressly understood, however, that the drawing is for the purpose of illustration and description only, and is not intended as a definition of the limits of the invention.

FIGURE 1 is a perspective view of the present invention hanger device being supported from a table top.

FIGURE 2 is a side elevation view of the present invention hanger device showing the alternative lateral positions of the supporting arm relative to the housing.

FIGURE 3 is a rear elevation view of the present invention shown in FIGURE 2.

FIGURE 4 is a partial cross-sectional view of the housing and supporting shaft taken through line 4-4 of FIGURE 2 illustrating a first position of the supporting shaft relative to the housing.

FIGURE 5 is a partial cross-sectional view of the present invention taken through line 5-5 of FIGURE 2 showing the supporting shaft in its second, extended position relative to the housing.

FIGURE 6 is a perspective view of the present invention hanger device being supported upon a surface having no spacial access there beneath.

An understanding of the present invention can be best gained by reference to FIGURE 1, the present invention hanger device being generally designated by the reference numeral 10. As shown in FIGURE 1, hanger device 10 is supporting a handbag 11. Hanger device 10 generally comprises a housing 12 from which extends a supporting shaft 13 which depends downwardly into a support arm 14. Support arm 14 is deflected upwardly into a hook 15 upon which handbag 11 is hung. As shown in FIGURE 1, housing 12 rests upon table top 15 with hook 15 supporting handbag 11 beneath table top 15. As will be explained, the present invention hanger device 10 provides for use thereof with tables or counters which do not provide for spacial access beneath the top surface thereof (FIGURE 6).

The structure of the present invention can be best understood by reference to FIGURE 2 and FIGURE 3. The present invention hanger device 10 comprises a cylindrical housing 12 having upper and lower planar surfaces. The interior coupling between support shaft 13 and housing 12, as shown in FIGURE 4 and FIGURE 5, is enclosed by cover 16 which is capable of having decorative indicia disposed thereon. The lower planar surface of housing 12 comprises a resilient pad 17 which can be fabricated from rubber or a polyurethane foam. Pad 17 is used to provide

traction and thereby maintain placement of housing 12 on table top 15. In addition, resilient pad 17 provides a protective layer to prevent defacing table top 15.

As shown in FIGURE 2, support shaft 13 extends outwardly from sleeve 19 in parallel spaced relation to the lower planar surface 18 of housing 12. Support shaft 13 depends downwardly forming support arm 14 which is in a planar relationship with support shaft 13 (FIGURE 3). Support arm 14 is comprised of segments 20, 21 and hook 15. Segment 20 of support arm 14 is perpendicular to support shaft 13. Support arm 14 is deflected at 22 separating segments 20 and 21 whereby segment 21 of support arm 14 is oriented beneath housing 12. Segment 21 of support arm 14 depends upwardly at 23 forming hook 15 upon which a handbag, purse or the like can be supported (FIGURE 1).

In order to meet the objectives of the present invention, support shaft 13 is coupled through sleeve 19 to housing 12 in a manner which provides for lateral movement thereof in the direction designated by reference numeral 25 (FIGURE 2). As shown in FIGURE 2, the range of movement represented by reference numeral 25 allows hook 15 to be laterally displaced and thereby change the center of gravity of a supported object relative to housing 12. The means to slidably structure couple support shaft 13 within housing 12 can be best understood by reference to FIGURE 4 and FIGURE 5. FIGURE 4 represents the orientation of support arm 14 as shown in solid lines in FIGURE 2. FIGURE 5 represents the orientation of support arm 14 as shown in phantom

lines in FIGURE 2. As shown in FIGURES 4 and 5, a central channel 30 is disposed through sleeve 19 and extends diametrically into the central core of housing 12. A perpendicular cross-bore 31 extends equally on either side of channel 30 and is adapted to receive biased leaf springs 32 and 33. Beyond cross-bore 31, channel 30 extends into expansion channel 34 which is adapted to accommodate the biasing ends of leaf springs 32 and 33. Finally, channel 30 is extended through housing 12 into channel extension bore 35 to accommodate the terminus 36 of support shaft 13 when moved to the position indicated by reference numeral 37.

Support shaft 13 is a cylindrical member, one end thereof depending downwardly to support arm 14, the opposite terminus 36 limiting the extended movement of support shaft 13 when moved in the direction indicated by reference numeral 40 (FIGURE 5). To meet objectives of the present invention, support shaft 13 can be moved in a range between two alternative positions designated by reference numeral 25 (FIGURE 2). The positional movement of support shaft 13 is defined by a pair of annular depressions 41 and 42 formed along support shaft 13 about the axis thereof. As stated, FIGURE 4 represents the position of support arm 14 as shown in solid line in FIGURE 2. In this position, the distal ends of leaf springs 32 and 33 are biased placing the distal ends thereof in forced contact with annular depression 41. FIGURE 5 illustrates the altered position of support arm 14 represented in FIGURE 2 in phantom lines. In this



position, the biased force imposed by the distal ends of leaf springs 32 and 33 place them in forced contact within annular depression 42. As stated, an objective of the present invention is to provide a hanger device 10 which can be easily stored. Based on the cylindrical profile of support shaft 13, support arm 14 can be rotated about the axis of support shaft 13 and relative to housing 12 as represented by the directional reference 43 (FIGURE 3). In this manner, when the present invention hanger device 10 is to be stored, support arm 14 can be rotated until it lies in the same plane as housing 12 thereby producing a substantially flat and easily storable structure.

Use of the present invention can be understood by reference to FIGURES 1 and 6. As stated, FIGURE 1 illustrates the support of a handbag beneath a table top 15 having spacial access there beneath. In this position, support arm 14 is in the closed position (FIGURE 4), hook 15 being substantially in alignment with housing 12. In FIGURE 6, hanger device 10 is supported upon a table top or counter 45 which has no spacial access beneath same as a result of an integral, vertical wall 46. Under these conditions, support shaft 13 and support arm 14 are urged in the direction designated by reference numeral 40. This displaces hook 15 relative to housing 12 in a manner which permits handbag 11 to be supported on hook 15 irrespective of the lack of spacial access beneath table top or counter 45.

CLAIMS:

1. A hanger device for hanging an object from a table top comprising:

(a) a housing having a substantially planar lower surface adapted to rest upon the table top and a central bore disposed therethrough in parallel spaced relation to the lower surface thereof, the axis of said central bore bisecting the housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of positional depressions disposed in the surface of said support shaft, one of said positional depressions being substantially adjacent the first end of said support shaft;

(c) biasing means for engaging said positional depressions in the surface of said support shaft coupled within the central bore of said housing and in biased contact with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

2. A hanger device as defined in Claim 1 wherein said housing is cylindrical, the central bore therethrough being aligned along the diameter of said housing.

3. A hanger device as defined in Claim 1 wherein said support arms depend from said support shaft in a perpendicular relationship thereto.

4. A hanger device as defined in Claim 1 wherein said support shaft has two positional depressions formed therein, each being disposed about the full circumference of said support shaft.

5. A hanger device as defined in Claim 1 wherein said biasing means comprises two leaf springs having a distal end adjacent with and in forced contact with said support shaft.

6. A hanger device as defined in Claim 1 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

7. A hanger device as defined in Claim 1 further including a rubber pad secured to the planar lower surface of said housing.

8. A hanger device for hanging an object from a table top comprising:

(a) a cylindrical housing having a substantially planar lower surface adapted to rest upon the table top and the central bore diametrically disposed therethrough in parallel spaced relation to the lower surface of said housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of spaced, positional depressions annularly disposed along the surface of said support shaft, one of said annular, positional depressions being substantially adjacent the first end of said support shaft, said support shaft being rotatable through 360° of arc about its own axis;

(c) biasing means for engaging said annular, positional depressions coupled within the central bore of said housing and in bias contacted with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being perpendicular thereto, said support arm being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

9. A hanger device as defined in Claim 8 wherein said support shaft has two annular, positional depressions formed therein.

10. A hanger device as defined in Claim 8 wherein said biasing means comprises two leaf springs, each having a biased distal end adjacent with and in forced contact with said support shaft.

11. A hanger device as defined in Claim 8 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

12. A hanger device substantially as hereinbefore described and with reference to the accompanying drawings.

DERWENT-ACC-NO: 1998-315550

DERWENT-WEEK: 199828

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TITLE: Hanger for e.g. handbag, umbrella - uses  
flexible chain  
for connecting cuff-like clip and suspended  
tool, such  
that suspended tool is rotatable from support  
board up to  
90 degrees

PATENT-ASSIGNEE: OMURA Y[OMURI]

PRIORITY-DATA: 1996JP-0305409 (October 14, 1996)

PATENT-FAMILY:

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003	A47G 029/00	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
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October 14, 1996		

INT-CL (IPC): A47G029/00

ABSTRACTED-PUB-NO: JP 10113275A

BASIC-ABSTRACT:

The hanger has a bearing (2) provided at the lower surface of a support board  
(1). A suspended tool (3) is connected to the support board via a shaft (5).

The shaft limits the rotation range of the suspended tool up to 90 degrees. A  
cuff-like clip (8) for holding a load e.g. handbag is attached to the suspended  
tool via a flexible chain (6).

ADVANTAGE - Reduces impact on body by which load collides by hanging

load on  
clip via flexible chain.

CHOSEN-DRAWING: Dwg.1/6

TITLE-TERMS: HANGER HANDBAG UMBRELLA FLEXIBLE CHAIN CONNECT CUFF CLIP  
SUSPENSION TOOL SUSPENSION TOOL ROTATING SUPPORT BOARD UP  
DEGREE

DERWENT-CLASS: P27

SECONDARY-ACC-NO:

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大村 祥隆  
埼玉県川口市元郷 5 丁目22番20号

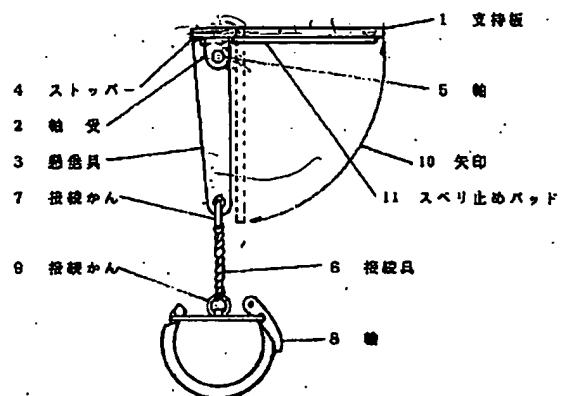
(72)発明者 大村 祥隆  
埼玉県川口市元郷 5 丁目22番20号

(54) 【発明の名称】 ハンガー装置

(57) 【要約】

【課題】テーブル又はカウンターの上面からハンドバッグなどを吊り下げるためのハンガー装置を提供する。

【解決手段】支持板1と懸垂具3は折畳める様に接続し、柔軟性の有る細長い接続具6と容易に開閉、着脱出来る構造の輪8により、荷に取付けたまま携帯する。使用する時には、輪8により荷に取付けてあるハンガー装置の、定められた角度以上には開かない様に接続してある支持板1と懸垂具3により、テーブル又はカウンターの上面からハンドバッグなどの荷を吊り下げる。荷に取付けた輪8の位置が不適切なときには、これを取外して、簡単に変えることができる。





## 【特許請求の範囲】

【請求項 1】支持板1の下面に設けられた軸受2により、90°以上には開かないように、軸5で接続した懸垂具3の端部に、自在に回転したり曲がること出来る柔軟性の有る細長い接続具6により接続された輪8、を備えたハンガー装置。

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】この発明は、ハンガー装置に関するものであり、特に、テーブルやカウンターの上面から、ハンドバッグや傘等の荷を掛けるための装置に関する。

## 【0002】

【従来の技術】ハンドバッグや傘等の荷を持って居る者が、食事や会合などで、テーブルを使用する時に、それらの荷を、膝、椅子の後ろ、テーブルの上、或は床に置いたりしているが、邪魔になったり、安全性に問題が生じるのは周知の事である。

【0003】本問題を解決するための各種装置が従来提供されているが何れも硬直的な構造を持っており、その携帯には必ずしも便利とはいえない。

## 【0004】

【発明が解決しようとする課題】本発明は、これらの欠点を除いて携帯に負担を感じない様にするものである

## 【0005】

【課題を解決するための手段】今その解決手段を図面を追いながら説明すれば、(イ)支持板1と懸垂具3を固定的な形状としないで、定められた角度以上には開かない様に接続し、(ロ)懸垂具3の端部から、柔軟性の有る細長い接続具6により接続された輪8を備える。

(ハ)接続具6により懸垂具3に接続された輪8は、容易に開閉、着脱出来る構造のもので、必要に応じて、ハンドバッグや傘等に取付けたまま、又は、取外して使用に供する構造を備えている。

## 【0006】

【発明の実施の形態】本発明は、以上のような形態であるから、これを使用するときは、支持板1と懸垂具3を折畳んだ状態で、輪8を使用してハンドバッグや傘等の荷に取付けて携帯する。ハンガー装置が必要なときは、折畳みである支持板1と懸垂具3がストッパー4が当たるまで開いてからテーブルや、カウンターの上面に支持板1を引っ掛けて、ハンドバッグや傘等の荷を吊り下げる。ハンドバッグや傘等の荷に取付けた輪8の位置が不適切なときには、これを取外して、改めて適切な所に変える。

【0007】尚、本発明の実施に当たって次の如きことが出来る。

(イ)支持板1は矩形的他に、円形、楕円形又は多角形など、十分な静止摩擦力が有れば良い。

(ロ)接続具6は柔軟性が有れば繊維製の紐でも、金属又は樹脂類の鎖でも良く、接続かん7及び接続かん9は使用しないで、直接に接続具6と懸垂具3及び輪8を接続してもよい。

(ハ)輪8は、必ずしも図1の様な形でなくても、着脱が容易で有れば、他の形状でも良いし、単に針金を2-3回巻いた様な物でも良い。

10 (ニ)ハンドバッグや傘等の荷の、ハンドルや紐に取付けて携帯するので、支持板1の上面に装飾的な図柄やインシヤル等を施せば本人の持物である事の確認に役立ち、アクセサリにもなる。また、企業などの宣伝用ロゴを入れて宣伝媒体とする事も出来る。

(ホ)スベリ止めパッド11を支持板1の下面に付ければ、静止抵抗を増幅できるので、より一層の安定性が増す。

## 【0008】

【発明の効果】テーブルや、カウンターの様に、脚部が卓端より引っ込んでいる場合図4でも、垂直な壁面の所図5でも何等の故障なく使用出来る。ハンドバッグや傘等の荷に体などが接触しても、荷は柔軟性の有る接続具6で吊り下げられて居るので支持板1に加わる衝撃力は減衰して安全に使用出来る。

## 【図面の簡単な説明】

【図1】本発明の立面図

【図2】本発明の平面図

【図3】本発明の側面図

30 【図4】脚部が卓端より引っ込んでいるテーブルの上面に置いた本発明の斜視図

【図5】壁面が垂直なカウンターなどの上面に置いた本発明の斜視図

【図6】ハンドバッグのハンドルに取付けて携帯する時の本発明の斜視図

## 【符号の説明】

1は支持板

2は軸受

3は懸垂具

4はストッパー

5は軸

6は接続具

7は接続かん

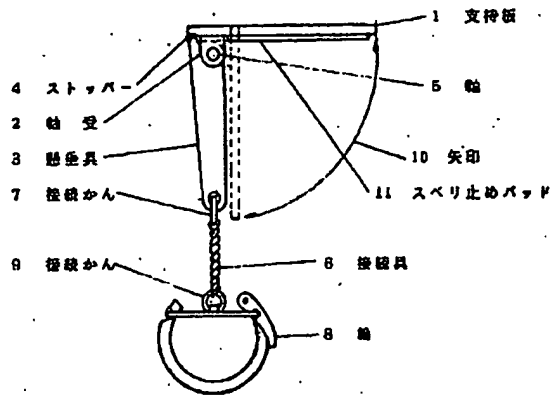
8は輪

9は接続かん

10は回転の範囲を示す矢印

11はスベリ止めパッド

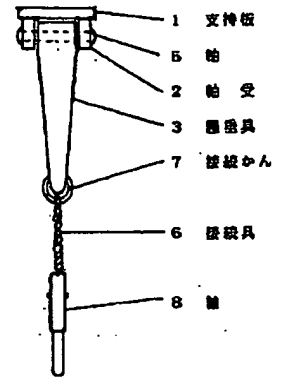
【図1】



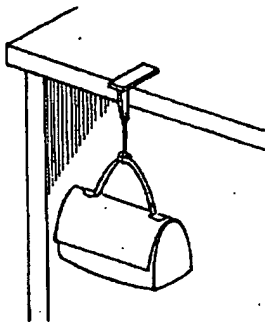
【図2】



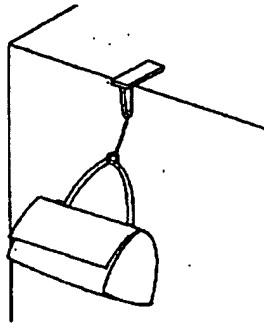
【図3】



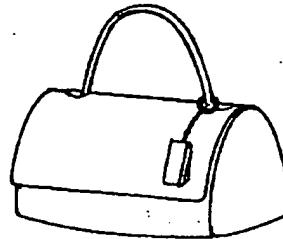
【図4】



【図5】



【図6】





IN THE UNITED STATES PATENT OFFICE

In Re Patent Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

Group Art Unit: 3632

Examiner: Le, Tan

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

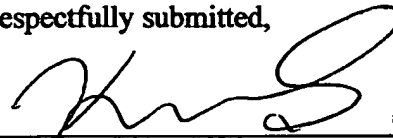
**DECLARATION OF TRANSLATION**

I, Kaoru Sugimura reside at 4283 Murietta Avenue #3 Sherman Oaks, CA 91423 in the county of Los Angeles. I prepared the attached translation of Japanese Patent 10-113275 to Omura, cited by the Examiner as prior art in the prosecution of the referenced Patent Application No. 10/763,426. I hereby affirm that the attached translation is a true and accurate translation, and that I am knowledgeable in the languages of Japanese and English.

I hereby acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the Application or any patent issuing thereon.

Respectfully submitted,

Date 3/12/06

  
Name

### **1<sup>st</sup> Page Summary (Abstract)**

A hanger device is offered to hang the handbag and the like from the surface of a table or the counter. Support board 1 and suspension member 3 can fold between the open and closed positions while a load is detachably secured within structural loop 8, which is secured to flexible splicer 6. The load such as handbags is hung from the upper surface of the table or the counter with support board 1 and suspension tool 3 connected so as not to open more than the provided angle of the suspender device installed in the load by loop 8 when using it. It is possible to shift position easily by detaching this when one of the loops 8 installed in the load is improper.

Reference Characters and corresponding Element names on First Page Drawing:

1. Support: backing
2. Bearing :ball, shaft
3. Iron bar
4. Stopper
5. A pivot
6. Connection tool, joining, link, connect, a junction ,conjunction
7. Connection link: ring, link, handle
8. Ring loop, hoop, ring, circle, wheel
9. Connection link
10. arrow
11. Stopper pad-a device to prevent slipping, skidding

(2)

Because of number 2 this system does not open more than 90 degrees  
On the edge of number 3 there is a connection tool,6, which is flexible and connects with number 8.

001

This invention offered is a hanger system which makes it easy to hang handbags or umbrellas on table tops or counters.

002

People who have handbags or umbrellas when going to meetings or restaurants have to place the items on lap or chair. This is an obstacle. There is also a problem with safety.

003

Other similar inventions are not portable.

004

This eliminates the others and is portable

005

Now to explain with the pictures.

Number 1 and 3 can open but not more than 90 degrees. On the edge of number 3 there is a connection tool, 6, which connects with number 8. Number 8 is very easy to open and close. When necessary you can use with handbags or umbrella.

006

When you carry it, number 1 and 3 are closed and number 8 connects to handbag or umbrella. When in use, number 1 and 3 are open until stopper number 4 touches the table top or counter. You hang number 1 on the top of the table and if number 8 is unsuitable you can move it.

007

Number 1 support bar can be round or a polygon or an oval, any style. You just need enough stillness friction. Number 6 can be fabric or metal or a resin-treated chain. It is not necessary to have number 7 or number 9. You can connect number 6 and number 3 and number 8 directly. Number 8 can be different shapes if they are easy to open and close. It can be wire. If you decorate top of number 1 support bar with initials or design.

You can identify personal items or use as an accessory. You can decorate with company logo as a novelty or to advertise your company. If you put a stopper pad underneath the support bar it will be more stable.

008

If as in picture number 4, the table has open space, or in picture number 5, has a vertical wall, you can use without problem. If anything touches the handbag or umbrella, because of flexible chain number 6 holding them, the support bar will receive less shock.

Page (3) pictures

1. elevation
2. plane, level
3. side view
4. table with space
5. vertical counter
6. picture when you carry with a handbag



# Merriam- Webster's Collegiate<sup>®</sup> Dictionary

TENTH EDITION

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28293031RT:WC00

**dis-sol-u-tion** \di-'sɒ-lu-'shən/ *n* (14c) 1: the act or process of dissolving; as a: separation into component parts - *b* (1): DECOMPOSITION (2) DEATH *c*: termination or destruction by dissolving, disrupting, or dispersing (the ~ of the republic); *d*: dissolving of an assembly or organization *e*: LIQUEFACTION 2: lute act or practice

**dis-solve** \di-'zɒlv-, 'zɒlv also -'zɒv or -'zɒv/ *vb* [ME; fr. L *dissolvēre* + *solvēre* to loosen — more at SOLVE] *vt* (14c) 1 *a*: to cause to disappear *b*: DESTROY *c*: to separate into components *d*: to bring to an end *e*: TERMINATE (as part of) ANNUL (an injunction) 2 *a*: to cause to pass into solution (sugar in water) *b*: MELT, LIQUEFY *c*: to cause to be removed *d*: to cause to fade out in a dissolve. 3 *archaic*: LOOSEN 4: to clear up (a problem) ~ *vi* 1 *a*: to become ed or decomposed *b*: BREAK UP, DISPERSE *c*: to fade away become fluid *d*: MELT *e*: to pass into solution *f*: to be emotionally (dissolved into tears) *d*: to resolve itself as by fusion (has dissolved into fear) *e*: to change by a dissolve (as to a Victorian parlor) — **dis-sol-vable** \-'zɒl-və-bəl-, -'zɒl-və-bəl/ *adj* 1: dissolvable 2: dissolvable

**dissolve** *n* (1916) : a gradual superimposing of one motion-picture television shot upon another on a screen

**dis-so-nance** \di-'sɒ-nəns/ *n* (15c) 1 *a*: lack of agreement or consistency between the beliefs one holds or between one's actions and one's beliefs — compare COGNITIVE DISSONANCE *b*: an inconsistency or disagreement ~ 2: *a*: mingling of dissonant sounds; *esp*: a clashing or unresolved musical interval or chord

**dis-so-nant** \-'nɒnt/ *adj* [MF or L; MF; fr. L *dissōnans*, *dissōnans* of *dissōnare* to be discordant, fr. *dis-* + *sonāre* to sound — SOUND] (15c) 1: marked by dissonance: DISCORDANT 2: DISCORDANT 3: harmonically unresolved — **dis-so-nant-ly** *adv*

**dis-suade** \di-'swaɪd/ *vt* **dis-suad-ed** \di-'swad-ɪd/ [MF or L; L *suadere*, fr. L *dissuādere*, fr. *dis-* + *suādere* to urge — more at SUADE] 1 *a*: to advise (a person) against something *b* *archaic*: to dissuade (an action) 2: to turn from something by persuasion

**dis-suad-er** *n*

**dis-sua-sion** \di-'swa-'zən/ *n* [MF or L; MF; fr. L *dissuasiō*, fr. *dissuādere*] (15c) : the action of dissuading

**dis-sua-sive** \di-'swa-'sɪv-, 'zɪv/ *adj* (1609) : tending to dissuade

**dis-sua-sive-ly** *adv* — **dis-sua-sive-ness** *n*

**dis-syl-la-bile** \di-'sɪ-lə-bəl, (j)di-'sɪ-/; 'di-'sɪ-, (j)di-'sɪ-/ *var* of DIS-SYLLABLE

**dis-sym-me-try** \di-'sɪ-'mɛ-'tri/ *n* (1845) : the absence of symmetry — **dis-sym-me-tric** \di-'sɪ-'mɛ-'tri-k/ *adj*

**dis-staff** \di-'staf/ *n*, *pl* **dis-staffs** \-'tʌfs-, 'tʌvz/ [ME *distaf*, fr. OE *staf*, fr. *dis-* (akin to MLG *dise* bunch of flax) + *staf* staff] (bef. 12c) 1 *a*: a staff for holding the flax, tow, or wool in spinning *b*: woman's work or domain 2: the female branch or side of a family

**distaff** *adj* (ca. 1633) : MATERNAL (the ~ side of the family) — compare SPEAR; also : FEMALE (~ executives)

**dis-tain** \di-'tʌn/ *vr* [ME *disteynen*; fr. MF *disteindre* to take away the color of, fr. OF; fr. *des-* + *teindre* to dye, fr. L *tingere* to wet, dye — more at TINGE] (14c) 1 *archaic*: STAIN 2 *archaic*: DISHONOR

**dis-tal** \di-'tʌl/ *adj* [distant + -al] (1808) 1: situated away from the point of attachment or origin or a central point *esp* of the body — compare PROXIMAL 2: of, relating to, or being the surface of a tooth that is next to the tooth behind it or that is farthest from the point of the front of the jaw — **dis-tal-ly** \-'tʌl-ɪ/ *adv*

**distal convoluted tubule** *n* (ca. 1901) : the convoluted portion of a nephron that lies between the loop of Henle and the collecting duct; it is the part of the nephron that is concerned with the reabsorption of water

**dis-tance** \di-'tʌns/ *n* (14c) 1 *obs*: DISCORD 2 *a*: separation in time *b*: the degree or amount of separation between two points, surfaces, or objects *c* (1): an extent of area or an advance along a route measured linearly (2): an extent of space measured linearly (within walking ~) *d*: an extent of advance from a starting point *e*: EXPANSE *f* (1): length of a race or contest (won the ~) (2): the full length (as of a prizefight or ball game) (3): ~ (training) 3: the quality or state of being distant; as *a*: remoteness *b*: personal and *esp*. emotional separation; as *a*: COLDNESS *c*: DIFFERENCE, DISPARITY 4: a distant point 5 *a*: AESTHETIC DISTANCE *b*: capacity to observe dispassionately *c*: the distance also last the distance: to complete a course

**distance** *vt* **dis-tanced**; **dis-tanc-ing** (1578) 1: to place at a distance 2: to leave far behind: OUTSPUR

**distance learning** *n* (1972) : learning that takes place via electronic means, as by television, radio, or computer, with the aid of linking instructors and students who are not together in a classroom

**dis-tant** \di-'tʌnt/ *adj* [ME, fr. MF, fr. L *distant*, *distans*, *pr* to stand apart, be distant, fr. *dis-* + *stare* to stand — more at STAND] 1 *a*: separated in space: AWAY *b*: situated at a great distance *c*: separated by a great distance from each other *d*: far behind (finished a ~ third) 2: separated in a relationship other than spatial (a ~ cousin) (the ~ past) 3: different in level or served or aloof in personal relationship: COLD 5 *a*: going to a distant place (on voyages) *b*: concerned with remote things (~ things) — **dis-tant-ly** *adv* — **dis-tant-ness** *n*

**dis-taste** \di-'tʌst-/ *vt* (1592) 1 *archaic*: to feel aversion to *ic*: OFFEND, DISPLEASE ~ *vi*, *obs*: to have an offensive taste

**distaste** *n* (1598) 1 *archaic*: dislike of food or drink *b*: DISINCLINATION (a ~ for opera) 2 *obs*: ANNOYANCE, DISLIKE

**dis-taste-ful** \di-'tʌst-/ *adj* (1607) 1: objectionable to one's personal taste: DISAGREEABLE 2: unpleasing to one's taste: LOATHSOME — **dis-taste-ful-ly** \-'fʌl-ɪ/ *adv* — **dis-taste-fulness** *n*

[illegible]



**en- ENCOURAGE**, **INSPIRE**, **HEARTEN**; **EMBOLDEN** mean to give courage or strength of purpose. **ENCOURAGE** suggests the raising of confidence esp. by an external agency (the teacher's praise encourages the students to greater efforts). **INSPIRE**, somewhat implied instilling life, energy, courage, or vigor into something; e.g., *inspired*, the people to resist). **HEARTEN** implies the dispelling of despair or despondency by an infusion of fresh courage. **EMBOLDEN** implies the giving of courage sufficient to overcome timidity or reluctance.

**en-bold-en** \in-'bold-en\ vt [prob. fr. L. *emboldare*, fr. *m-* + *bollere* 'to make firm'] (1568) 1: the act of encouraging 2: the state of being encouraged 3: something that encourages

**en-cour-age-ing** \in-'ju;-ri-jin\ adj (1593) : giving hope or procuring courage

**SPIRITING**

**en-crime-son** \in-'krim-sən\ vi (-jiz) (1597) 1: to make or dye crimson 2: to stain with blood

**en-croach** \in-'kroch\ en-vt (ME *encrochen* to get; seize, fr. MF *crocher*, fr. OF, fr. *en-* + *croc-* 'to crook' - more at CROCUS) (1534) 1: to enter by gradual steps or by stealth into the possessions of another 2: to advance beyond the usual or proper limits gradually ~ing sea 3: syn see TRESPASS → **en-croach-er** n

**en-croach-ment** \-'krōch-mənt\ n

**en-crust** \in-'krast-in\ vb [prob. fr. L. *incrustare*, fr. *m-* + *crusta* 'shell'] (1641) 1: to cover, line, or overlay with or as if with crust 2: to form a crust

**en-crus-ta-tion** \in-'krus-tā-shən\ n

**en-crypt** \in-'kript\ en-vt [*en-* + *crypt-* (as in cryptogram)] (C15) 1: ENCRYPTER 2: ENCODE 3: ENCRYPTION

**en-cum-ber** \in-'kəm-bar\ vt -cum-bered, -cum-berring (-bɪŋ-) (1500) 1: MF *encumber*, fr. OF, fr. *en-* + *cumbere* 'to burden; weigh'; cf. WEIGH DOWN BURDEN 2: to impede or hinder the function or activity of: HINDER 3: to burden with a mortgage (as a mortgage) ~ an estate

**en-cum-brance** \in-'kəm-brɑns\ n (1535) 1: something that burdens 2: IMPEDIMENT 3: a claim (as a mortgage) against property

**en-cum-branc-er** \-brɑn(t)-sər\ n (1858) : one that holds an encumbrance

**en-cy** \ən(')-se-, -nt(\) n suffix [ME, *-encie*, fr. L. *-entia* = -ENCE] (1) quality or state (despondency) (2) a person or thing

**en-cyc-li-cal** \in-'si-kli-kəl\ en-adj [LL *encyclicus*, fr. Gk *enkuklios*, gen. of *kuklos* 'circle' - more at IN; WHEREBY] (1534) 1: addressed to all the individuals of a group 2: GENERAL

**encyclical** n (1837) : an encyclical letter; specif.: a papal letter issued by the pope to all bishops of the Roman Catholic Church

**en-cyc-lo-pe-dia** also **en-cyc-lo-pae-dia** \in-'si-klə-'pe-di-ə\ n [from Gk *enkuklios* 'general' + *pai-da* 'child' - more at FEW] (1500) 1: a work that contains information on all branches of knowledge comprehensively a particular branch of knowledge usu. arranged alphabetically often by subject

**en-cy-clo-pe-dic** also **en-cy-clo-pae-dic** \-'pe-dik\ adj (1824) 1: relating to, or suggestive of, an encyclopedia or its methods 2: covering a subject: COMPREHENSIVE (an ~ mind) (an ~ armor) → **en-cy-clo-pe-dic-al-ly** \-dɪ-k(ə)-lē\ adv

**en-cy-clo-pe-dism** \-'pe-dɪ-zəm\ n (1833) : the quality or state of being encyclopedic

**en-cy-clo-pe-dist** \-'pe-dist\ n (1651) 1: one who compiles or writes an encyclopedia 2: often cap.: one of the writers of a French encyclopedia (1751–80) who were identified with the Enlightenment and deism and scientific rationalism

**en-cyst** \in-'sist\ en-vt (1845) : to enclose in a cyst ~ vi : to become enclosed in a cyst → **en-cyst-ment** \-'sist(-)mənt\ n

**'end** \end\ n [ME *ende*, fr. OE; akin to OHG *enti* end, L. *ante* before] (bef. 12c.) 1: a: the part of an area that lies at the extremity b (1) : a point that marks the extent of something (2) : a: where something ceases to exist (world without ~) c: the end of or last part lengthwise: TIP d: the terminal unit of something that is marked off by units e: a player stationed at the extreme line (as in football) 2: a: cessation of a course of action, pursuit, etc. b: DEATH, DESTRUCTION c (1) : the ultimate state of something SULT, ISSUE 3: something incomplete, fragmentary, or remaining REMNANT 4: a: an outcome worked toward PURPOSE (the ~ of history is to poetry — R. P. Warren) b: the object by virtue of which something takes place 5: a: a share in an undertaking (kept your ~ up) b: a particular operation or aspect of an undertaking or organization (the sales ~ of the business) 6: something extreme 7: ULTIMATE — used with *the* 7: a period of action or competition of various sports events (as archery or lawn bowling) INTENTION — **end-ed** \end-'dəd\ adj — **in the end**: AFTER ALL FINALLY — **no end**: EXCEEDINGLY — **on end**: without a stoppage (it rained for days on end)

**2nd** \end\ (bef. 12c.) 1: a: to bring to an end b: DESTROY 2: to reach the end of ~ vi 1: a: to come to an end b: to reach a specified limit or rank or situation — usu. used with *up* (~ed up as a ceiling) c: DIE syn see CLOSE

**3rd** \end\ (13c.) FINAL, ULTIMATE (~ results) (~ markets) (~uct)

**4th** \end\ [prob. alter. of E dial. *in* (to harvest)] (1607) dial *End* (grain or hay) into a barn or stack

**end-or-end-comb form** [F, fr. Gk, fr. *endon* within; akin to Gk *endon*, Hitt *andan* within - more at IN] 1: within : inside (endoskeleton) — compare ECTO-, EXO- 2: taking in (endothermic)

**en-dam-age** \in-'da-mij\ vi [ME] (14c.) : to cause loss or damage

**end-amoe-ba** \in-'də-'mē-bə\ n [NL, genus name] (ca. 1879) : a genus (*Entamoeba*) comprising amoebas parasitic in the intestines of insects — compare ENTAMOEBA

**en-dan-ger** \in-'dān-jər\ vb -dan-gered; -dan-ger-ing \-'dān-jər-ɪŋ\ (1509) : to bring into danger or peril ~ vi : to create a dangerous situation (driving to ~) → **en-dan-ger-ment** \-'dān-jər-mənt\ n

**en-dan-gered** adj (1964) : being or relating to an endangered species (an ~ bird) (put on the ~ list)

**endangered species** n (1964) : a species threatened with extinction broadly: anyone or anything whose continued existence is threatened

**en-darch** \en-'därk\ adj (ca. 1900) : formed or taking place from the inward (~ xylem)

(1926) : a football play in which  
of scrimmage to take a hand  
the opposite flank ~  
-m'y ven-dār-ta-'rek-to-mē' n  
in artery (fr. end + arteria  
removal of the inner layer of an ar  
occluded (as by intimal plaq  
-brān'v'n (1927) : TELENCEPI  
1891) : END PLATE  
n (1580) 1 obs : to make hig  
to cause to become beloved or a  
~  
-dir-mənt'v'n (1610) 1 : a wa  
tion 2 : the act or process of  
-de-vər'v'b en-deav-o-red; e  
to exert oneself; fr. en + deve  
to strive to achieve or re  
obligation) by exertion of  
to work with set purpose' syn s  
25c) 1 : serious determined eff  
ENTERPRISE (fields of >  
Bri var of ENDEAVOR  
-r-mik, in-'v adj [P *endémique*,  
Démia action of dwelling, fr. en  
populacé ~ more at DEMA  
to a particular people or co  
a particular field, area, or ei  
(the self-indulgence ~ in th  
similar to a locality or region (~  
-en-dem-i-cal-ly -'de-mi-k  
-tē, -dā-'mi-) n -en-de-mi  
1892) : an endemic organism  
-dōr-'gā-nik'v adj [end. + G  
ENDOTHERMIC 1 (an ~ blood  
-dek-,sən-, -sin'v'n (1947) : an  
~  
-gām'v'n (1884) : the stage of  
stages; also : the final stages of s  
n (bef. 12c) : something that  
b : one or more letters or s  
indication  
COTE  
-jān-'dev'v'n [ME, fr. MF, fr.  
] (14c) 1 : an annual or  
widely cultivated as a sal  
developing crown of chicory w  
salads by growing in darkness  
-dē-pā-'pər'v'n (1888) : ENDPAPER  
-lēs'v adj (bef. 12c) 1 : being  
2 : extremely numerous  
-Edmund Burke) ; 3 : j  
-less-ly adv -end-less-ness n  
1 : a line marking an end or b  
line at either end of a football f  
goal line b : a line at either en  
perpendicular to the sidelines  
-lēn'v adj [ME *endelong*, alter. c  
prep. -more at ALONG  
1895) : a man at each end of the lir  
engages in comic repartee wit  
-nost'v adj (bef. 12c) : situate  
-not'v'n (1926) : a note placed  
-dō-bi-'ā-tik-, -bē-'v adj [IS  
or tissues of a host (~ fungi)  
-dō-'kār-dē-s'l'v adj (ca. 184  
relating to the endocardium  
-kār-di-tās'v'n [NL] (ca. 18:  
and its valves  
-kār-dē-əm'v'n, pl -dī-a -dē-  
1864) : a thin serous membrane  
-kärp'v'n [F *endocarpe*] (18  
of the pericarp of a fruit (as  
when it consists of two or m  
texture or consistency  
-kast'v'n (1949) : ENDOCRA  
-dō-'k'an-drāl'v adj (18  
formed by, or being ossificat  
from centers arising in cartil:  
position of lime salts in the ca  
followed by secondary absorpt  
true bony tissue  
-dō-'krā-nē-s'l- v'n (19  
cranial cavity showing the app  
brain  
-is-k'rēn-, -krēn'v adj []  
to separate ~ more  
1911) 1 : secreting interna  
secretions that are distribu  
of the bloodstream (an  
cf. relating to, affecting, or resen  
tumors)  
1922) 1 : HORMONE 2 : ENDO  
n (1914) : a gland (as the thy  
ocrine secretion ~ called als  
-dō-'krī-nī-'ā-jik-, -krī-  
v adj (ca. 1934) : involving or  
to endocrinology  
-dō-'krī-nā-l-jē-, -krī-

**S E C O N D   E D I T I O N**

# **Calculus** **of a Single Variable**

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## 3.1

## EXTREMA OF FUNCTIONS

We begin this section by looking informally at the property that a curve and its tangent line exhibit similar behavior near the point of tangency. We then make our observations more precise and turn to the problem of finding extreme values for a function  $f$ .

In Figure 3.1, the line  $l$  is tangent to the graph of the function  $f$  at the point  $P(a, f(a))$ . Note that  $l$  has a positive slope: It rises vertically as it moves from left to right. The graph must exhibit this same rising property near  $x = a$ . In terms of the function  $f$ , we see that as  $x$  increases through  $a$ , the values of  $f(x)$  also increase. Since the slope of the tangent line at  $P$  is the derivative  $f'(a)$  of the function  $f$  at  $x = a$ , we conclude: *If  $f'(a) > 0$ , then  $f$  is increasing at  $a$ .*

Examining the situation at the point  $Q = (b, f(b))$  on the graph of  $f$ , we see that the tangent line  $l^*$ , which has a negative slope, falls vertically as it moves from left to right. The graph of  $f$  near  $Q$  also drops as it passes through  $x = b$ . We conclude: *If  $f'(b) < 0$ , then  $f$  is decreasing at  $b$ .*

These conclusions are clearly valid only near the point of tangency. The similarity between the behavior of the tangent line  $l$  and the behavior of the function  $f$  holds only when the line and the curve are close to each other, and the tangent line is guaranteed to be close to the curve only near the point of tangency. The line and the curve can drift far apart as we move away from the point of tangency. The tangent line  $l$  at point  $P$  in Figure 3.1 continues to rise forever, but this behavior is not true for the graph of  $f$ . Indeed, we have seen that  $f$  is decreasing at  $Q$ .

At the point  $R(c, f(c))$  on the graph of  $f$ , in Figure 3.1, the tangent line  $l'$  is horizontal: It is neither rising nor falling. The graph in Figure 3.1 shows the behavior of the function near this point: The function is decreasing as it approaches  $x = c$  and is increasing afterward. We can say that the function  $f$  has a local minimum value at  $x = c$ —that is, near  $x = c$ , all the values of  $f(x)$  are greater than  $f(c)$ .

Our reasoning here has been geometric and informal. To make our conclusions more precise, let us now consider a graph that represents variations in some physical quantity such as temperature, resistance in an elec-

Figure 3.1

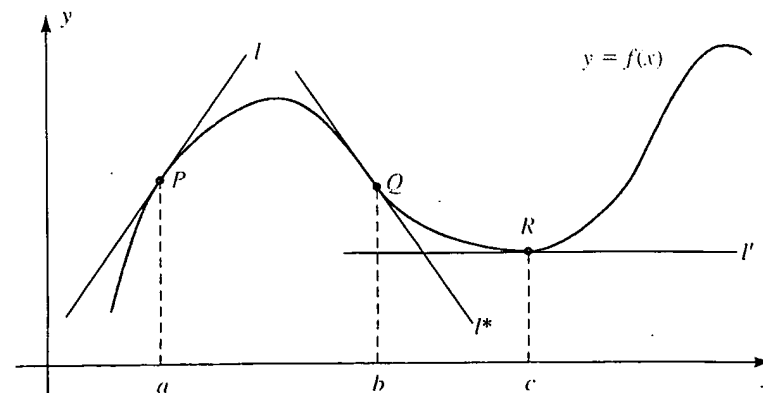
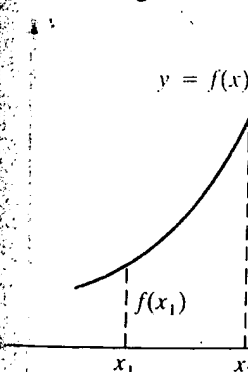


Figure 3.3

Increasing function



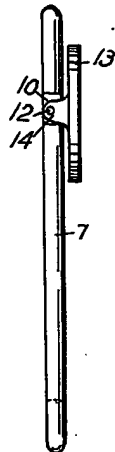
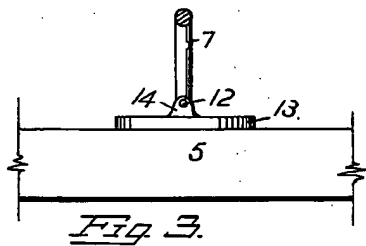
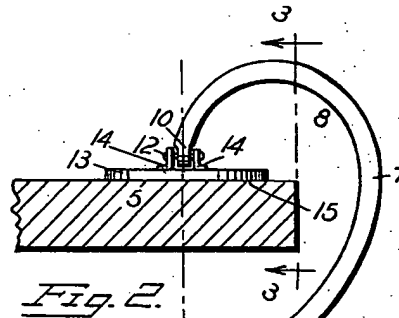
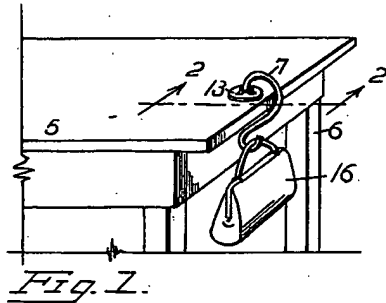
Dec. 15, 1936.

A. VON SCHROEDER

2,064,133

HANGER FOR HANDBAGS AND THE LIKE

Filed March 12, 1935



INVENTOR.  
ALBRECHT VON SCHROEDER

BY

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ATTORNEY.

## UNITED STATES PATENT OFFICE

2,064,133

## HANGER FOR HANDBAGS AND THE LIKE

Albrecht von Schroeder, Denver, Colo.

Application March 12, 1935, Serial No. 10,672

2 Claims. (Cl. 248-214)

This invention relates to improvements in folding supports for handbags and the like.

Ladies ordinarily carry handbags of different sizes and when they go to a restaurant for meals, or sit down at a card table, the handbag must either be laid upon the table, or held in the lap, both ways of which are inconvenient. Since women usually carry money and other valuables in their handbags, it is necessary to keep them in view at all times, to prevent unauthorized persons from obtaining access to them.

It is the object of this invention to produce a hook or support of such construction that it can be readily carried in the handbag and which shall be so designed that it can be used for supporting the handbag from the edge of a table and which makes it possible for a woman to keep her handbag within sight and easy reach when seated at a table.

The improved support or hook that forms the subject of this invention will now be described in detail and for this purpose reference will be had to the accompanying drawing on which it has been illustrated in its preferred form and in which Figure 1 is a fragmentary perspective view of a card table showing a handbag supported from the edge thereof by the improved hook;

Figure 2 is a section through the edge of the table, taken on line 2-2, Figure 1, and shows the hook in place thereon, the handbag being indicated by dotted lines;

Figure 3 is a section taken on line 3-3, Figure 2, but shows only a portion of the hook; and

Figure 4 is an edge elevation of the hook showing the same in folded position and ready to be inserted into the handbag.

In the drawing, reference numeral 5 designates the top of a table, which in Figure 1 has been shown as an ordinary card table provided with foldable legs 6. The hook 7 is formed from a wire or rod of any suitable material such as steel or brass, and whose surface may have any desirable finish such as nickel, silver or gold plating. The hook is so bent that it resembles, in a general way, the letter S, the upper loop 8 being quite large in comparison with the lower loop 9, all as shown in Figure 2. The end 10 of loop 8 is directed downwardly and has its center in a plane x-x which passes through the center 11 of the loop 9. End 10 is flattened and its sides lie in spaced planes perpendicular to the plane of the hook. End 10 is provided with an opening for the reception of the pivot pin 12. A plate 13, which may be either circular or oblong, is provided on its upper surface with two lugs or ears 14 that are spaced to receive the end 10, and provided with openings for the reception of the pivot pin 12.

Plate 13 can be turned about pivot 12 from the position shown in Figures 2 and 3 to the position shown in Figure 4; in the latter position the hook

can be said to be folded and can be easily put into the handbag or a pocket.

When the hook is to be employed for supporting a handbag or any other object, the plate 13 is turned from the position shown in Figure 4 to that shown in Figures 2 and 3, and the hook is put into position over the edge of the table in the manner shown in Figures 1 and 2. The flat surface of the plate engages the table top and prevents it from becoming scratched or marred. The under surface of the plate may have a covering of rubber or felt if desired.

After the hook has been put into position, the handbag, designated by numeral 15, may be hung by its handle 17 from the loop 9. It will be seen from the drawing that the hook can swing about the axis of the pivot 12, but not in the opposite direction. The handbag can be supported in either closed or open position, and when it is open, the owner has ready access to it at all times, which is a great convenience.

After the hook has been used, it is removed and the plate 13 turned into the position shown in Figure 4, in which position it takes up very little space.

Although the hook is primarily intended to support handbags, it is evident that it can be employed for supporting any other articles such as clothing.

In the claims the words "upper" and "top" are employed to designate the end of the hook having the enlarged loop and the "bottom" or "lower" the end having the small loop 9.

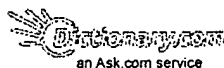
Having described the invention, what is claimed as new is:

1. A support comprising in combination, a hook-portion of substantially S-shape, the upper loop being larger than the lower and adapted to extend over the edge of a table top, the lower loop serving as a hook to support an object, the end of the upper loop terminating in a portion whose axis extended intersects the lower loop, and a plate attached to the end of the upper loop by a pivot that is perpendicular to the axis and lies in the plane of the hook-portion, said plate serving to contact with a supporting surface.

2. A support comprising in combination a hook-portion of substantially S-shape, the end of the upper loop being directed downwardly so that its center line intersects the lower loop, the end of the upper loop having a plate attached thereto by a pivot pin that lies in the plane of the hook-portion and is perpendicular to the center line of the end of the loop, the plate being rotatable about the pivot from a plane perpendicular to the center line and into a plane parallel with the plane of the hook-portion.

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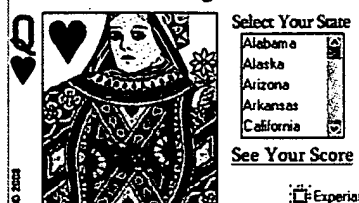
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**swiv·el** (swiv-uh-l) Pronunciation Key - Show IPA

Pronunciation *noun, verb, -eled, -el-ing* or (especially British) -elled, -el-ling.

*-noun*

1. a fastening device that allows the thing fastened to turn around freely upon it, esp. to turn in a full circle.
2. such a device consisting of two parts, each of which turns around independently, as a compound link of a chain, one part of which turns freely in the other by means of a headed pin or the like.
3. a pivoted support allowing a gun to turn around in a horizontal plane.
4. a swivel gun.
5. a device attached to a loom and used as a shuttle to weave extra threads in the production of small figures, esp. dots.

*-verb (used with object)*

6. to turn or pivot on or as if on a swivel: *He swiveled his chair around.*

7. to fasten by a swivel; furnish with a swivel.

*-verb (used without object)*

8. to turn on or if as on a swivel.

[Origin: 1275-1325; ME (n.), equiv. to swiv- (weak s. of OE swifan to revolve; c. ON svifa to turn) + -el instrumental suffix]

*-Related forms*

**swiv-el-like**, *adjective*

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**swiv·el** (swiv'el) Pronunciation Key

*n.*

1. A link, pivot, or other fastening so designed that it permits the free turning of attached parts.
2. A pivoted support that allows an attached object, such as a chair or gun, to turn in a horizontal plane.



- turn or gear, to turn in a horizontal plane.
3. A gun that turns on a pivot.

**v. swiv-eled or swiv-elled, swiv-el-ing or swiv-el-ling, swiv-els**

- v. tr.**
1. To turn or rotate on or as if on a swivel.
  2. To secure, fit, or support with a swivel.

**v. intr.**



To turn on or as if on a swivel.

[Middle English swyvel.]

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**swivel** (n.)

1307, from frequentative form of stem of O.E. verb swifan "to move in a course, sweep" (a class I strong verb), from P.Gmc. \*swipanan (cf. O.Fris. swiva "to be uncertain," O.N. svifa "to rove, ramble, drift"), from PIE base \*swel- "swing, bend, move in a sweeping manner." M.E. swive was the principal slang for "to have sexual intercourse with," a sense that developed c.1300. This probably explains why, though the root is verbal, the verb swivel is not attested in Mod.Eng. until 1794.

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**swivel**

*noun*

1. a coupling (as in a chain) that has one end that turns on a headed pin

*verb*

1. turn on a pivot [syn: pivot]

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**Swivel**

Swiv"el, n. [AS. sw[=i]fan to move quickly, to remove; akin to Icel. sveifla to whirl, shake, sv[=i]fa to ramble, to turn. See Swoop, and cf. Swift a reel, Swift, a.]

1. (Mech.) A piece, as a ring or hook, attached to another piece by a pin, in such a manner as to permit rotation about the pin as an axis.

2. (Mil.) A small piece of ordnance, turning on a point or swivel; -- called also *swivel gun*. --Wilhelm.

*Swivel bridge*, a kind of drawbridge that turns round on a vertical axis; a swing bridge.

*Swivel hook*, a hook connected with the iron strap of a pulley block by a swivel joint, for readily taking the turns out of a tackle.

*Swivel joint*, a joint, the two pieces composing which turn round, with respect to each other, on a longitudinal pin or axis, as in a chain, to prevent twisting.

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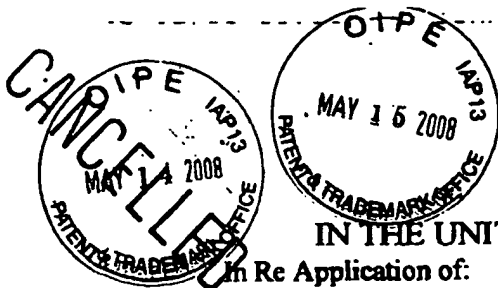
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

Examiner: Le, Tan

Group Art Unit: 3632

**Declaration**

Ronald R. Shea  
2540 Country Hills Rd.  
Apt. 192  
Brea, CA 92821

Board of Patent Appeals and Interferences  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF LENNA BAUERLY**  
**UNDER 37 § CFR 1.116(e) and 1.68**

I, Shelly Lenna Bauerly, am the named inventor and owner of U.S. Patent Application No. 10/763,426 by Bauerly, entitled "Purse Hanger," filed on January 23, 2004.

The development of a working model of the claimed invention consisted of numerous experiments, including many designs that failed to achieve the design initiatives.

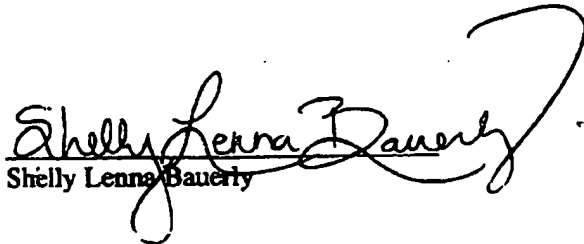
The design of the rigid arm and chain combination, as described in the patent application, that would remain stable when supporting a purse from a table top, was only achieved after that experimentation and failure by actual models.

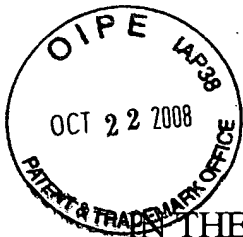
Additional experimentation with various designs was undertaken to develop a means of reducing the likelihood that a purse and hanger would be knocked off a table by a slight bump or brush of a passer-by. Various rubber and cork surfaces were not sufficient to prevent the purse hanger from sliding off of a table when brushed by a passer by. Attempts to suspend a purse sufficiently far under a table to minimize brushing resulted in impractical designs. Eventually, the swivel joint described in the invention was conceived to allow the purse to rotate freely when bumped, thereby releasing rotational energy without the purse hanger pivoting off a table top due to that rotational energy. When experiments were conducted with this design, it greatly enhanced the stability of the purse hanger when a purse hanging therefrom was bumped or brushed by a passer-by.

I certify under penalty of perjury that I have actual knowledge of all claims and assertions set forth in the foregoing statement, and that foregoing statement is true and accurate. I am aware that willful false statements and the like are punishable by fine or

imprisonment or both under 18 U.S.C. § 1001 and may jeopardize the validity of the application, or any patent issuing thereon.

Signed by my hand this 10<sup>th</sup> day of May, 2008

  
Shelly Lenna Bauerly



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:	)	Examiner: Le, Tan
	)	
Shelly Lenna Bauerly	)	Group Art Unit: 3632
	)	
Application Serial No. 10/763,426	)	<b>Evidence Appendix for Appeal Brief</b>
	)	<b>under 37 CFR 41.37</b>
Filed: January 23, 2004	)	
	)	
For: Purse Hanger	)	Ronald R. Shea
	)	2540 Country Hills Rd.
	)	Apt. 192
	)	Brea, CA 92821
	)	(714) 560-0342

**EVIDENCE APPENDIX**

Submitted in conjunction with the Appeal Brief under 37 CFR 41.37 for U.S. Patent Application 10/763,426.

## PURSE HANGER

### BACKGROUND OF THE INVENTION

#### Field of the Invention

5 The present invention is directed to the field of mechanical devices. More particularly, the present invention is directed to a purse hanger for hanging purses and handbags from tabletops and surfaces.

#### Description of the Prior Art

10 At coffeehouses, restaurants, bars, or indoor and outdoor cafes, people crowd at tables with limited space. In addition to space for food and drink, table tops are often called upon to support ash trays, chess boards, books, newspapers, etc. Those who carry purses and handbags often crowd their handbags into the center of the table. Purses and handbags on a tabletop reduce the space on the tabletop, and are an annoyance when reaching for food, drink, or other items. Some handbag users choose to sit with their handbags on their respective laps, creating a less than leisurely atmosphere. Others elect to place their handbag on the floor or sidewalk next to their chair, under their chair, or beneath the table. Multiple inconveniences abound from these options, however. Floors and sidewalks are often unsanitary, and wholly unsuitable for contact with anything other than the bottom of one's shoe. Additionally, purses and handbags which are placed next to or under a chair are completely out of the line of sight of the owner, and can be stolen without the knowledge of the owner until it is time to leave. Even when not stolen, the vigilance required to continually check on a purse or handbag beneath a chair again detracts from the leisure and pleasure of a café or restaurant experience.

25 Purse hangers for hanging a purse from a table often align the weight of a purse in an unstable position, causing the purse holder to slide off the table. Bolting or fastening a purse hanger to a table top prevents a purse hanger from sliding off the table, but are only useful

when a purse owner sits at the table fitted with the fixed-in-place purse hanger. Prior art purse hangers that are carried in a purse are easily lost within the purse, and difficult to find among other various items stored within a purse.

5        There remains therefore a need for a purse holder that can easily be located without becoming lost in the purse of a user. There is also a need for a purse holder that will not readily slide off a tabletop.

### **BRIEF SUMMARY OF THE INVENTION**

10

According to an embodiment of the invention, a purse hanger for hanging a purse from a flat surface comprises a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface. A rigid arm has a proximal end coupled with the rigid interface member and a distal end oriented vertically beneath the planar interface area. The proximal end can be swivelably coupled to the rigid interface member, or fixedly coupled, according to alternative embodiments. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member for engaging a strap of a purse.

20        According to one embodiment, the rigid arm is detachably coupled with the rigid interface member.

The rigid interface member can have a storage cavity, which can contain various personal items including, but not limited to one or more shades of lip gloss, foundation, make up, vitamins, drugs, a timepiece, a cellular telephone, a camera and combinations thereof. The storage cavity can be divided into multiple storage spaces by modular inserts.

30        A cover for covering the storage cavity has a securement means for securing the cover to the rigid interface member. The securement means may include, but is not limited to snaps, clasps, hooks, hinges, magnets, threaded members, and combinations thereof.

The rigid arm can include a horizontal extension parallel with the planar interface area, and a vertical extension that is about perpendicular to the horizontal extension.

The vertical extension can include a lengthening means for altering a length of the vertical extension. The flexible member will preferably have at least one swivel joint, which can  
5 include a top swivel member coupled to the distal end of the rigid arm, a bottom swivel member coupled to the purse engagement member, or a swivel link.

The purse engagement member is advantageously formed from a rigid loop having a movable loop member movably engaged to a primary loop member. When the movable loop  
10 member is in a first position, the purse engagement loop is a closed loop, and when the movable loop member is in a second position, the purse engagement member is an open loop. The movable loop member can be movably engaged to the primary loop member through a pivot means or through a slide means, such as a tubular member into which the movable loop member can retract. A spring member urges the movable loop member toward the first  
15 position.

A method for storing a purse hanger comprises the steps of securing the purse engagement member to a purse handle, opening the purse, flexing the flexible member, and, placing the rigid interface member within the purse, wherein the purse engagement member  
20 remains secured to the purse strap.

### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS**

FIG. 1 is an isometric view of a purse supported from a table by the purse holder of  
25 the present invention.

FIG. 2 is an enlarged isometric view of an embodiment of the purse holder of FIG. 1 with a hinged movable loop member.

30 FIG. 3 is an isometric view of the purse holder of FIG. 1 partially stored within a purse while the purse engagement loop remains engaged to a purse handle.



FIG. 4 is an isometric view of the purse holder of FIG. 1 partially stored within a purse while the purse engagement loop remains engaged to a purse handle.

5        FIG. 5 is a top plan embodiment of the purse holder of FIG. 1 having a timepiece within the rigid interface member and a slide opening purse engagement member.

FIG. 6 is an isometric view of the flexible member of the purse holder of FIG. 1 comprising a swivel ball chain swivelably secured to an upper flexible member coupling.

10

FIG. 7 is an isometric view of a vertical extension portion of a rigid arm of the purse holder of FIG. 1 with a turnbuckle for adjusting the vertical length of the rigid arm.

15

FIG. 8 is a cross sectional view of the turnbuckle of FIG. 7 showing the interior thread engagement with the vertical extension.

FIG. 9 is an isometric view of an embodiment of the rigid interface member of FIG. 1 having a neck comprising a detachable ball and assembly.

20

FIG. 10 is an isolated view of the rigid interface member of FIG. 1 swiveling about the rigid arm.

FIG. 11 is a cross sectional top plan view of a threaded neck embodiment of the purse holder of FIG. 1 engaged with a threaded rigid arm.

25

FIG. 12 is a rear elevational view of the purse holder of FIG. 1 showing a swivel engagement of the rigid interface member with the rigid arm.

30

FIG. 13 is a front elevational view of an embodiment of the purse holder of FIG. 1 showing a hinged cover coupled to the top end of the rigid interface member and padding coupled to a bottom surface of the rigid interface member.

FIG. 14. is an isometric view of an embodiment of the purse holder of FIG. 13 with a mirror formed in the cover and lip gloss in the rigid interface embodiment.

5        FIG. 15 is a top plan view an embodiment of the purse holder of FIG. 1 with an enlarged knob and choke flange securing the rigid interface member to the rigid arm.

FIG. 16 an isometric view of the purse holder of FIG. 1 with a threaded cover and modular insert members fitting inside the rigid interface member, and a flexible member  
10        comprising gold braid surrounding a high tensile strength core.

FIG. 16a is a cross sectional view of the flexible member of FIG. 16.

FIG. 17 is an embodiment of the flexible member of FIG. 1 comprised of pearls strung  
15        around a high tensile strength core.

FIG. 18 is an alternative embodiment of a purse hanger having a rigid interface member comprising a frame with multiple legs.

20        FIG. 19 is the purse hanger of FIG. 1 having a rigid arm with a progressive curve.

## DETAILED DESCRIPTION OF THE INVENTION

### Overview

25        Referring primarily to FIGS. 1 and 2, a purse hanger 20 for hanging a purse 80 from a horizontal surface such as a tabletop 21 has a rigid interface member 22. As used herein, the term purse includes any handbag device having at least one handle 81 for carrying by hand, or for looping over a shoulder, and a compartment area for carrying personal items and chattels.

30        A rigid arm 45 extends horizontally outward from the rigid interface member. The rigid arm 45 has a proximal end 46 and a distal end 55. The proximal end is coupled to the

neck 38 of the rigid interface member 22. Preferably, the neck is pivotably coupled to the rigid arm, thereby allowing the distal end to pivot to a lowest gravitational position. Embodiments are envisioned, however, wherein the rigid arm 45 is secured to the neck 38 in a non-pivoting relationship.

5

The rigid interface member 22 has a planar interface area 23. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom surface of a pad 28 in contact with the tabletop 21. In the embodiment of FIG. 18,  
10 the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87. As discussed in greater detail herein, a purse will hang in a stable orientation from a purse hanger 20 if the distal end 55 of the rigid arm 45 is positioned vertically beneath the planar interface area 23.

15 A flexible member 60 is secured to the distal end 55 through an upper flexible member coupling 61, and to a purse engagement member shown as a rigid loop 70 through a lower flexible member coupling 62. One or more straps 81 of a purse 80 are placed within the rigid loop. The rigid interface member 22 is placed on a table top, and the purse hangs from the table top, suspended by the purse holder. Certain prior art purse holders have suspended a  
20 purse strap from the tip of a metal rod, potentially damaging or even poking a hole in an expensive purse strap. Because the strap rests in a rigid loop, the present invention does not inflict damage to purse straps.

A common inconvenience of prior art purse holders has been that, when stored within  
25 the purse, subsequent use requires searching for the purse holder amidst a purse full of personal items, or abandoning the search and storing the handbag or purse below the table or in a traditional manner. An advantage of the present invention is the flexible member 60. Referring primarily to FIGS. 3 and 4, when the purse hanger is not in use, the flexible member 60 of the present invention allows most of the purse hanger 20 to be stored inside the  
30 purse 80 while the purse engagement member 70 remains secured to a purse strap 81. Because the purse hanger can be easily located in the purse due to its connection to the purse

strap 81, the purse holder is easily located no matter how many personal items are stored in a purse.

### **The Interface Member**

5 Referring primarily to FIGS. 5 and 9-16, the rigid interface member 22 has a flat bottom surface 24 defining the planar interface 23 for resting parallel to a tabletop 21. The planar interface area 23 can be coextensive with the bottom surface 24 of the rigid interface member, as shown in FIG. 2, or can be defined by padding 28 attached to the bottom surface, as shown in FIG. 13 and discussed further below.

10

An alternative embodiment shown in FIG. 18 includes a multi-leg embodiment 25 of a rigid interface member comprising a frame 26 with three legs 87 extending therefrom. The distal ends of the legs individually interface with a tabletop 21, and thereby define a geometric plane which includes the planar interface 23.

15

As best seen in FIGS. 12, 13 and 18, a layer of padding 28 established an optimal frictional contact with a table top 21, and avoids scratching table surfaces. The padding can be formed from a variety of materials, including but not limited to felt, cork, rubber, or other materials. Those skilled in the art will recognize that in embodiments utilizing layer of padding, the planar interface 23 is technically established by the padding, not the rigid interface member 22 or the distal ends of the legs 87.

20

According to one embodiment, the rigid interface member 22 releasably couples to a cover 29 by a securement means, shown in FIGS. 5, and 14 as a clasp and hinge assembly. An upper clasp 32 on the cover engages a lower clasp 33 on the rigid interface member to secure the cover in place. When the clasp release 34 is pressed by a user, the clasp assembly releases the cover from the rigid interface member. According to the embodiment shown in FIGS. 9, 10, and 13, an optional hinge 31 prevents the cover from detaching completely from the rigid interface member 22. A hinge can also be used independent of a clasp means. The hinge assembly 31 can advantageously be used with other mechanical closing devices, such as a two-position rocker-and-spring assembly, wherein, when the cover is below a center

25

30

position, the cover is urged shut by the spring, and when lifted above the rocker point, the cover is urged open by the spring.

FIG. 16 shows an alternative embodiment wherein the cover 29 releasably engages the  
5 rigid interface member in a threadable engagement. Mutually engageable upper threads 34 and lower threads 35 are respectively formed around the edges of the cover 29 and the rigid interface member 22.

As seen in FIGS. 14 and 16, a storage cavity 30 within the rigid interface member 22  
10 can be used to store personal items, such as lip gloss 41 or other forms of make-up 82, prescription medications 83, a condom, or other small personal items. Consumable personal items such as lip gloss will preferably be stored in a pre-formed container that can be removed and replaced within the storage cavity 30. FIG. 16 shows an alternative embodiment including modular inserts 43 which can be used to segregate storage of separate items, such as  
15 different shades of lip gloss or make-up, different prescription medications, etc.

FIG. 5 illustrates an embodiment comprising a timepiece 44 disposed within the storage cavity 30, and a watch stem 27 extending out of the side of the rigid interface member 22. Alternative electrical and mechanical devices such as battery operated timepieces,  
20 cameras, or cellular telephones stored within the cavity 30 are envisioned within the scope of the claimed invention. Those skilled in the art will understand that insertion ports for batteries, digital memory, cell-phone ear plugs, and other electro-mechanical accessories can be positioned in a variety of places, such as in the bottom surface 24, the side of the rigid interface member 22, or in the storage cavity 30 as accessed after opening the cover 29.  
25 Watches and other electronic and mechanical devices are preferably removable for battery replacement, servicing, or exchanging with other insertable devices and members.

The upper surface of the rigid interface member, seen in FIG. 1, 9 and 19 will preferably be a decorative member. Expensive embodiments can include onyx, lapis lazuli, or  
30 other precious or semi-precious stones, as well as porcelain, ceramic, gold, platinum and silver etchings, and other jeweled and decorative surfaces. The decorative surfaces can

include various artistic displays, emblems of college and professional sports teams, casinos, restaurants, inaugurations, sports championships and other commemorative events.

5 A neck 38 extending horizontally from the rigid interface member 22 is discussed in greater detail in conjunction with the rigid arm 45. The neck can be integrally formed with the rigid interface member, or securely attached thereto. The axis of the neck is preferably parallel to the planar interface area 23.

### The Rigid Arm

10 The neck 38 couples a rigid arm 45 to the rigid interface member 22.

Referring primarily to FIGS. 2, 5-12 and 14-16, the rigid arm 45 is formed from a rigid material or combination of materials that are strong enough to maintain a preformed shape while supporting the weight of a purse. Materials can include, but not limited to metal, graphite, composite and kevlar compositions or combinations. The rigid arm preferably includes a horizontal extension 50 and a vertical extension 51. Embodiments are envisioned wherein the rigid arm is single piece construction, such as a contiguous wire rod. Alternative embodiments discussed in greater detail below envision a rigid arm having multiple separate members joined by a linking piece, such as a turnbuckle.

20

The proximal end 46 of the rigid arm is located at the tip of the horizontal extension 50, and couples with the neck 38 of the rigid interface member 22. When the rigid arm is coupled with the neck 38, the horizontal extension of the rigid arm is parallel to the planar interface area 23.

25

The distal end 55 of the rigid arm couples with the flexible member 60 through an upper flexible member coupling 61.

30 As discussed above, the engagement between the proximal end 46 of the rigid arm 45 and the neck 38 is preferably a swivelable engagement. FIG. 5 shows a basic swivel engagement that permanently couples the horizontal extension 50 to the neck 38.

FIG. 9 shows a swivel engagement including an inner neck portion 38a extending from the rigid interface member 22 and an outer neck portion 38b coupled with the horizontal extension 50. A release means shown as a ball-detent engagement allows the rigid interface member 22 to be detached from the rigid arm 45. A depressible ball 58 in the inner neck engages a detent opening 59 in the outer neck portion 38b to form a ball-detent engagement. The rigid interface member 22 can be released from the rigid arm 45 by depressing the ball 58 and withdrawing the inner neck 38a from the outer neck 38b.

FIG. 11 shows an alternative swivel embodiment with a release means comprising a threaded engagement between the horizontal extension 50 of the rigid arm 45 and the neck 38. The horizontal extension 50 includes a threaded portion 48 engaged with a threaded interior 42 of the neck 38. The threaded embodiment allows the horizontal extension 50 of the rigid arm 45 to swivel within the neck 38. Although threaded engagements can allow a rigid interface member 22 to be detached from the rigid arm 45, alternative embodiments are envisioned wherein a stop, such as a thread interruption, prevents the complete unscrewing and detachment of the rigid arm from the rigid interface member.

FIG. 15 is an alternative swivelable embodiment having an enlargement shown as a rounded boss 47 formed on the proximal end of the rigid arm, and secured within the neck by a constriction shown as a choke flange 37 within the neck 38.

The specific embodiments of swivelable and releasable engagements of the rigid arm 45 and the rigid interface member 22, as described above, however, are exemplary, and are not intended to limit other swivel engagements that are fully intended within the scope of the claims, including detachable and non-detachable swivel engagements. Additionally, non-swivelable embodiments are envisioned wherein the rigid arm 45 is engaged to the neck 38 in a non-swiveling relationship.

As shown in FIGS. 1, 2, 5, 12, 14 and 16, rigid arm embodiments 45 can include a vertical extension 51 perpendicular to the horizontal extension 50. A lengthening means on

the vertical extension 51, shown as a turnbuckle 49, allows adjustment of the vertical distance between the planar interface area 23 and the distal end 55 of the rigid arm 45. A vertical lengthening means allows the purse hanger 20 to be adjusted according to the thickness of the table, bar, or other horizontal surface from which a purse may be hung. By positioning the lengthening means on a vertical extension 51, the act of lengthening or shortening the vertical extension will not move the distal end 55 out of the center axis.

FIGS. 7 and 8 show an enlarged view of a lengthening means in the form of a threaded turnbuckle 49 coupling an upper member 56 and a lower member 57 of the vertical extension. According to one embodiment, the turnbuckle can be completely unscrewed from at least one of the upper and lower members 56, 57, thereby allowing the user to combine a different flexible member 60 with the purse hanger assembly. An alternative embodiment, however, envisions stops such as enlarged unthreaded portions on the upper and lower members 56, 57 that prevent detachment of the upper and lower members from the turnbuckle.

FIG. 19 illustrates alternative embodiment with a rigid arm 45 defined by a large progressive curve. The shape of the rigid arms in the figures are exemplary, and other alternative shapes are envisioned. The rigid arm can be formed from multiple members, such as two rods and a turnbuckle as shown in FIG. 16, or from single piece construction as shown in FIG. 19.

### **The Stable Region**

As best seen in FIGS. 12, 13 and 18, the stable region 69 is the region vertically beneath the planar interface area 23. When a purse 80 is suspended by a purse hanger 20 supported by a flat surface 21, and the distal end 55 of the rigid arm 45 is within the stable region, the sum of the moments acting on the rigid interface member will be zero, allowing a purse hanger to remain in a stable orientation. In swivel embodiments, the rigid arm will be urged by gravity to pivot until the distal end 55 passes into the stable region. In non-swiveling embodiments, the distal end will be fixedly disposed within the stable region.



As noted above, the planar interface area 23 depends on the shape and arrangement of the member or members in physical contact with the tabletop. In the embodiment of FIG. 2, the planar interface area is about co-extensive with the bottom surface of the rigid interface member. In the embodiment of FIG. 13, the planar interface area 23 is defined by the bottom surface of a felt, rubber or cork pad 28 in contact with the tabletop 21. In the multi-leg embodiment 25 of FIG. 18, the planar interface area 23 is a substantially triangular area with the corners of the triangle established by the position of the three legs 87.

As best seen in FIG. 12, the stable region 69 vertically beneath the planar interface area 23 is largest when the planar interface area is horizontal. When the rigid interface member is swiveled to a non-horizontal orientation, the stable region 69 collapses in size.

The weight of a purse will naturally cause some flexure of a rigid arm, and can alter the horizontal position of the distal end 55. If bending or flexure were to move the distal end out of the stable region 69 during use, the purse hanger would become unstable. FIGS. 1, 2 and 19 show a purse hanger 20 designed, when a purse of a predetermined weight is supported by the purse hanger, the distal end 55 is aligned along the center axis 68 that intersects the geometric center 67 of the planar interface area 23 at right angles. According to this design, minor flexure of the rigid arm or minor manufacturing variations will not move the distal end 55 outside of the stable region 69 or otherwise degrade the stability or usefulness of the purse hanger. In swiveling embodiments, the arc defined by the distal end 55 will pass through the center axis 68. In non-swiveling embodiments, the distal end 55 of the rigid arm should be fixedly disposed in vertical alignment beneath the planar interface area 23 when the planar interface area is horizontal.

### **The Flexible Member**

As best shown in FIGS. 1-5 and 16, a flexible member 60 has a first end with an upper flexible member coupling 61 for coupling with the distal end 55 of rigid arm 45, and a second end with a lower flexible member coupling 62 for coupling with the purse engagement loop 70. The flexible member can be formed from any material or combination of materials that is sufficiently flexible to allow the purse hanger 20 to be stored in a purse 80 without detaching

the purse engagement loop 70 from the purse strap, and strong enough to reliably hold a purse in a suspended position. The opening in the purse can be substantially closed with the flexible member protruding through a small opening. Because part of the flexible member will remain outside the purse, the user can easily pull the remainder of the purse hanger out of the purse for use. According to a preferred embodiment, the flexible member will be between one inch and four inches in length. The appended claims, however, comprehend embodiments having a flexible member less than one inch or greater than four inches.

When a purse 80 hangs from a purse hanger as in FIG. 1, an impact against the purse 80, such as might be imparted from a knee or chair, can impart a torque to the purse which can be transmitted to the interface member 22, dislodging it from the tabletop 21. Such torque, however, can be dissipated by allowing the purse to spin when impacted by a knee or chair. The flexible member 60, therefore, should include at least one swivel member. FIG. 5 shows a purse hanger with a swivel engagement in the upper flex coupling 61, and a flexible member 60 in the form of a swivel ball chain. FIG. 2 shows a purse hanger with swivel engagements for the upper flex coupling 61 and the lower flexible coupling 62, as well as a swivel ball chain for the flexible member. FIG. 6 is an enlarged view of a swivel ball chain that can detachably connect to the upper flexible member coupling 61.

FIG. 16 and cross sectional view 16A show a non swiveling flexible member 60 comprising a flexible high strength tensile core 65 surrounded by decorative external layering, shown as gold braid 64. High strength tensile members can include, but are not limited to steel or other wire rope, nylon, spun glass, carbon kevlar, as well as composites that are not yet developed. External decorative layering can include, but is not limited to, gold, silver or platinum chain or braid, as well as other jewelry. FIG. 17 shows pearls 66 strung on a high tensile strength core 65. Because a high tensile strength core such as steel rope will impart torque when twisted, and will not release the torque through swiveling, embodiments comprising a non-swiveling flexible member such as FIGS. 16 and 17 comprise non-swivelable flexible members 60 connected with swivelable upper flexible member coupling 61 and lower flexible member coupling 62.

### The Purse Engagement Loop

FIGS. 1-4 show a purse engagement loop 70 for holding the handle, or handles 81 of a purse 80. Referring to FIGS. 2 and 5, a purse engagement loop 70 is a rigid member having a primary loop member 71 and a movable loop member in the form of a hinged member 72 that is hingably secured to the primary loop member. The hinged member 72 can move between first and second positions relative to the primary loop member. A spring member urges the movable loop to the first position. When the movable loop member is moved from the first position to the second position relative to the primary loop member, the loop 70 is an open loop, and one or both purse straps 81, can be inserted through the opening and placed into the loop. When the hinged member 72 is restored to the first position, the loop 70 becomes a closed loop, securely holding the purse strap(s) inside the loop.

According to the embodiment of FIG. 2, the movable loop member 72 is attached to the primary loop member 71 by a hinge 74, and moves between the first and second positions in a swivel motion. A spring 73 exerts a force between the primary loop member and the hinged member 72 to urge the hinged member to swivel to the closed position.

The embodiment of FIG. 5 shows a primary loop member having a tubular construction 76, and a movable loop member in the form of a slidable member 75 that can slidably retract into the tubular construction. A helical spring 78 is positioned within the tubular construction to urge the slidable member 75 into a closed position. A finger tab 77 on the slidable member provides a means for a user to retract the slidable member.

An alternative embodiment for purse engagement loop 70, seen in FIG. 1, comprises a continuous loop without any movable member. During fabrication of a purse, a purse handle 81, or multiple handles, as in FIG. 1 are inserted through the continuous rigid loop 70. The purse handle is then fixed to the purse 80 in a manner known in purse construction. The purse hanger 20 is thereby permanently or semi-permanently affixed to the purse handle.

The present invention is directed to a purse hanger for hanging a purse from a table or other horizontal surfaces. The purse hanger has a flexible member allowing the rigid

interface member of the purse hanger to be stored in the purse without detaching the purse engagement member 70 from a purse strap. Many features that would be readily understood to one skilled in the art have not been discussed so as to not needlessly obscure important features of the claimed invention. At the same time, many specific details included herein are  
5 descriptive of particular embodiments, but are not essential to every embodiment comprehended by the appended claims. Accordingly, these details should not be construed to limit the scope of the claims appended hereto. It will be apparent to those skilled in the art that many modifications, alternatives and equivalent embodiments are possible without departing from the spirit and scope of the invention set forth in the appended claims.

10

## CLAIMS

### I Claim:

- 1 1. A purse hanger for hanging a purse from a flat surface comprising:
  - 2 a) a rigid interface member defining a planar interface area;
  - 3 b) a rigid arm with a proximal end coupled with the rigid interface member and a  
4 distal end;
  - 5 c) a flexible member with a first end coupled to the distal end of the rigid arm,  
6 and a second end coupled to a purse engagement member.
- 1 2. The purse hanger according to claim 1 wherein the planar interface area is  
2 substantially co-planar with said flat surface, and wherein said distal end of said rigid  
3 arm is oriented vertically beneath said planar interface area.  
4
- 5 3. The purse hanger according to claim 1 further comprising a purse with a purse strap  
6 engaged with said purse engagement member.
- 1 4. The purse hanger according to claim 1 wherein the rigid arm is swivelably coupled  
2 with the rigid interface member.
- 1 5. The purse hanger according to claim 1 wherein the rigid arm is detachably coupled  
2 with the rigid interface member.
- 1 6. The purse hanger according to claim 1 wherein the rigid interface member has a  
2 storage cavity.
- 1 7. The purse hanger according to claim 6 further comprising storage members stored in  
2 said storage cavity, said storage members being selected from among a group  
3 consisting of lip gloss, foundation, make up, vitamins, drugs, a condom, modular  
4 inserts, a timepiece, a cellular telephone, a camera and combinations thereof.

- 1 8. The purse hanger according to claim 6 further comprising a cover for covering said  
2 storage cavity, and securement means for securing said cover to said rigid interface  
3 member.
- 1 9. The purse hanger according to claim 8 wherein said securement means is selected  
2 from among a group consisting of snaps, clasps, hooks, hinges, magnets, threaded  
3 members, and combinations thereof.
- 1 10. The purse hanger according to claim 1 wherein said rigid arm comprises a horizontal  
2 extension parallel with said planar interface area.
- 1 11. The purse hanger according to claim 10 wherein the rigid arm comprises a vertical  
2 extension that is about perpendicular to said horizontal extension.
- 1 12. The purse hanger according to claim 11 wherein the vertical extension has a  
2 lengthening means for altering a length of the vertical extension.
- 1 13. The purse hanger according to claim 1 wherein the first end of the flexible member is  
2 coupled to the distal end of the rigid arm by a swivel joint.
- 1 14. The purse hanger according to claim 1 wherein the second end of the flexible member  
2 is coupled to the purse engagement member by a swivel joint.
- 1 15. The purse hanger according to claim 1 wherein the purse engagement member is a  
2 rigid loop.
- 1 16. The purse hanger according to claim 15 wherein the rigid loop is a single continuous  
2 loop.
- 1 17. The purse hanger according to claim 15 wherein the rigid loop is a formed from a  
2 movable loop member movably engaged to a primary loop member, wherein, when

1 the movable loop member is in a first position, the rigid loop is a closed loop, and  
2 when the movable loop member is in a second position, the rigid loop is an open loop.

1 18. The purse hanger according to claim 17 wherein the movable loop member is movably  
2 engaged to the primary loop member through a pivot means.

1 19. The purse hanger according to claim 17 wherein the movable loop member is slidably  
2 engaged to the primary loop member through a slide means.

1 20. The purse hanger according to claim 19 wherein said slide means includes a tubular  
2 member into which the movable loop member can retract.

1 21. The purse hanger according to claim 17 further comprising a spring member for  
2 urging said movable loop member toward said first position.

1 22. A purse hanger for hanging a purse from a horizontal surface comprising:  
2 a) a rigid interface member with a planar interface area resting on said horizontal  
3 surface;  
4 b) a rigid arm with a proximal end coupled to said interface member and a distal  
5 end disposed vertically beneath said planar interface area;  
6 c) a flexible member with first and second ends, said first end of said flexible  
7 member secured to said distal end of said rigid arm;  
8 d) a purse engagement member coupled with said second end of said flexible  
9 member.

1 23. The purse hanger of claim 22 wherein the flexible member is at least one inch long.

1 24. The purse hanger of claim 22 wherein said purse engagement member is a rigid loop.

1 25. The purse hanger of claim 24 wherein the rigid loop comprises a primary loop  
2 member coupled to a movable loop member, said movable loop member being

1       movable between first and second positions, wherein, in said first position, said rigid  
2       loop is a closed loop, and in said second position, said rigid loop is an open loop.

1   26.   The purse hanger of claim 25 further comprising a spring member engaged with said  
2       primary loop member and with said movable loop member to urge said movable loop  
3       member to said first position.

1   27.   The purse hanger according to claim 22 wherein said rigid arm has a lengthening  
2       means.

1   28.   The purse hanger according to claim 27 wherein said lengthening means comprises a  
2       turnbuckle.

1   29.   The purse hanger according to claim 22 further comprising a storage cavity within said  
2       rigid interface member.

1   30.   The purse hanger according to claim 29 further comprising a cover for covering said  
2       storage cavity, and a cover engagement means for engaging said cover to said rigid  
3       interface member.

1   31.   The purse hanger of claim 30 wherein the cover engagement means is selected from  
2       among a group consisting of hinges, clasps, threaded members, chains, clips, and  
3       combinations thereof.

1   32.   The purse hanger according to claim 29 further comprising storage members stored  
2       within said storage cavity, said storage members selected from among a group  
3       consisting of lip gloss, foundation, modular dividers, vitamins, prescription  
4       medication, a condom, a cell phone, a time piece, a camera, and combinations thereof.

1   33.   A method for storing a purse hanger having a rigid arm with a proximal end extending  
2       from a rigid interface member and a distal end secured to a first end of a flexible



3 member, a second end of said flexible member having a purse engagement member  
4 secured to a strap of a purse, the method comprising the steps:  
5 a) opening the purse;  
6 b) flexing said flexible member; and,  
7 c) placing said rigid interface member within said purse, wherein said purse engagement  
8 member remains secured to said purse strap.

1 34. The method of claim 33 further comprising the step of substantially closing said purse,  
2 wherein said flexible member protrudes through a small opening in said purse.

## ABSTRACT OF THE DISCLOSURE

A purse hanger for hanging a purse from a flat surface has a rigid interface member defining a substantially planar interface area that is co-planar with the flat surface during use.

- 5 A rigid arm has a proximal end swivelably coupled with the rigid interface member and a distal end, which, in use, is oriented by gravity to a position vertically beneath the planar interface area. A flexible member has a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member such as a rigid loop securing the purse strap. The flexible member allows the rigid interface member to be stored in the purse
- 10 while the purse engagement member remains secured to the purse strap. The rigid interface member can have a storage cavity for storing personal items.

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

1 / 5

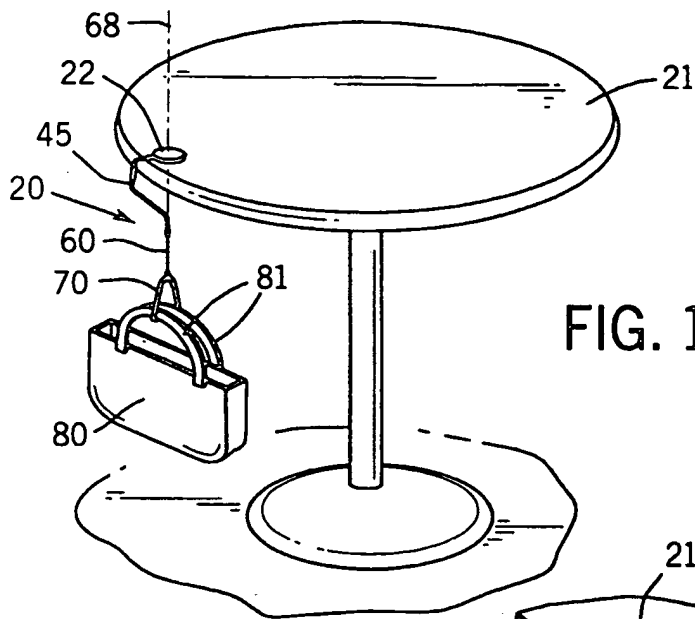


FIG. 1

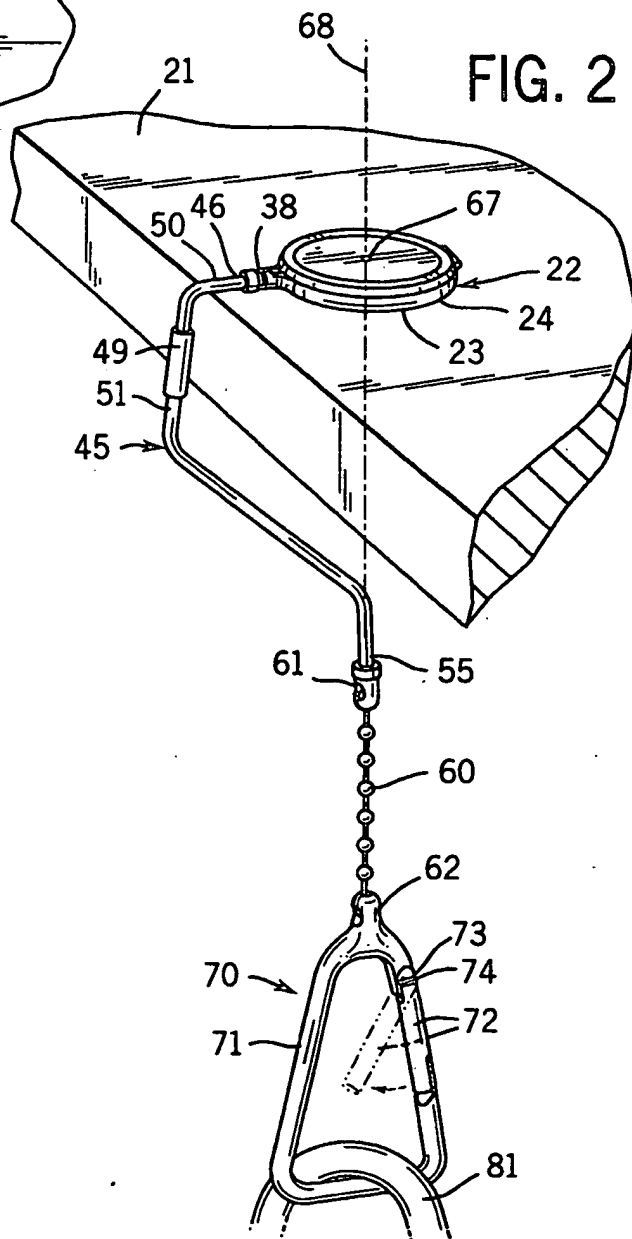


FIG. 2

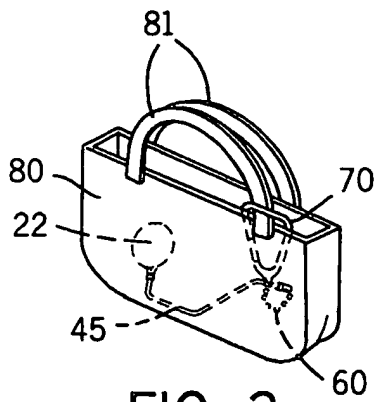


FIG. 3

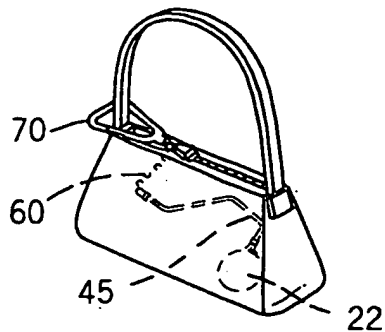
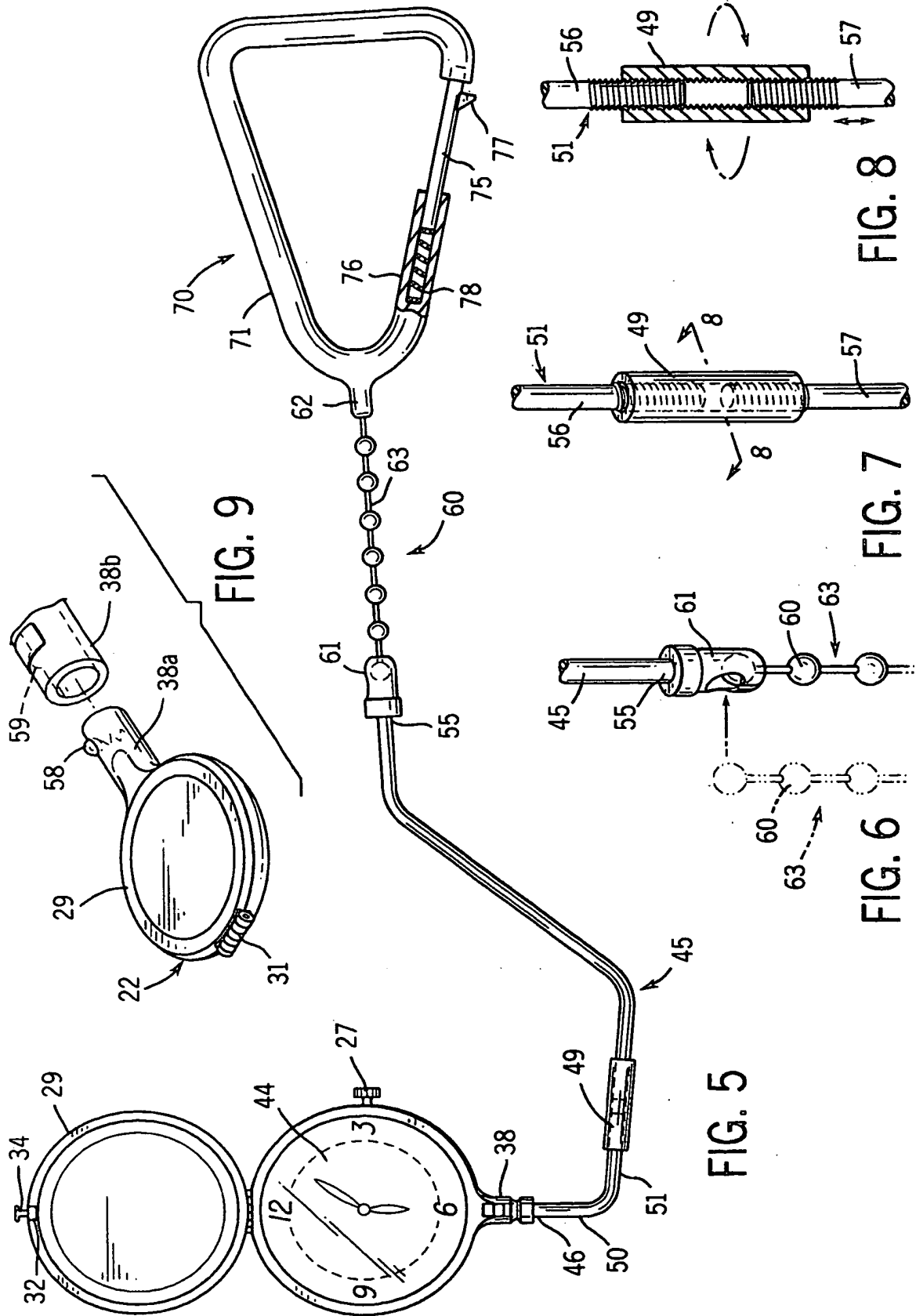


FIG. 4

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100

2 / 5



PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100  
3 / 5

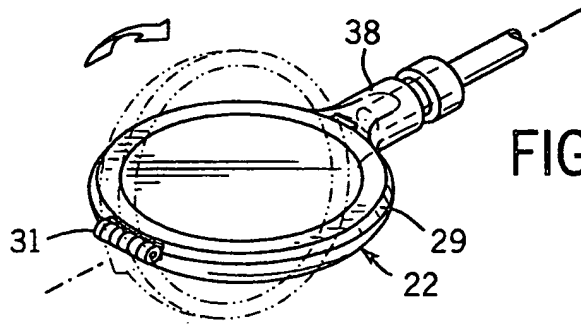


FIG. 10

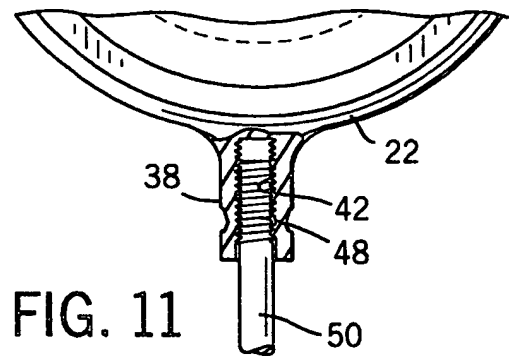


FIG. 11

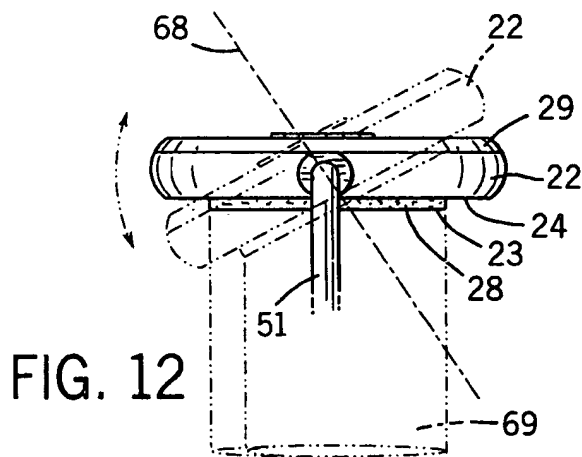


FIG. 12

FIG. 13

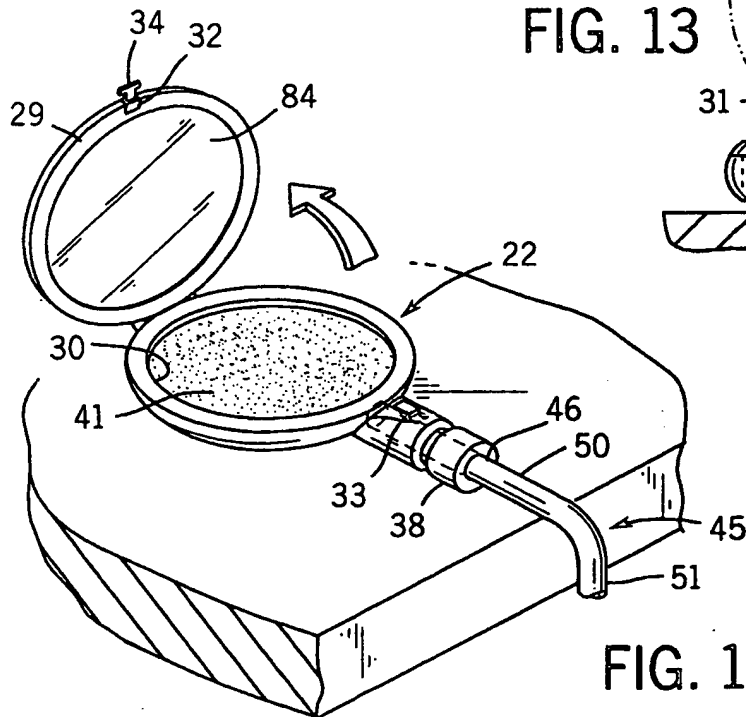
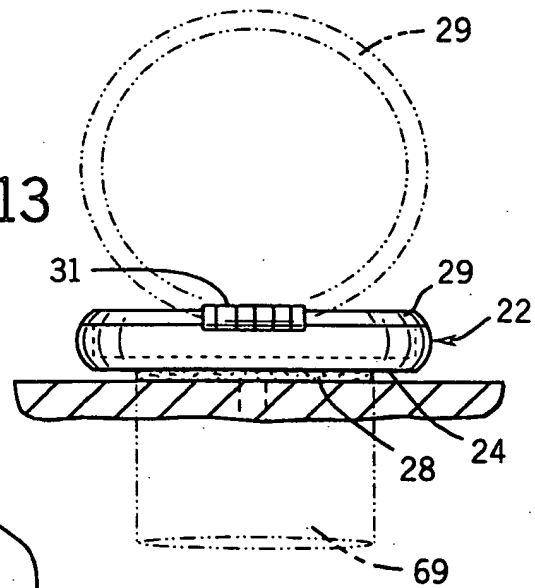


FIG. 14

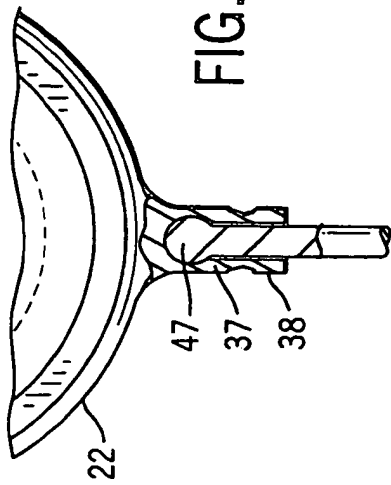


FIG. 15

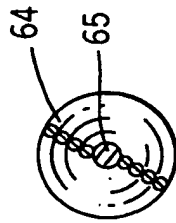


FIG. 16A

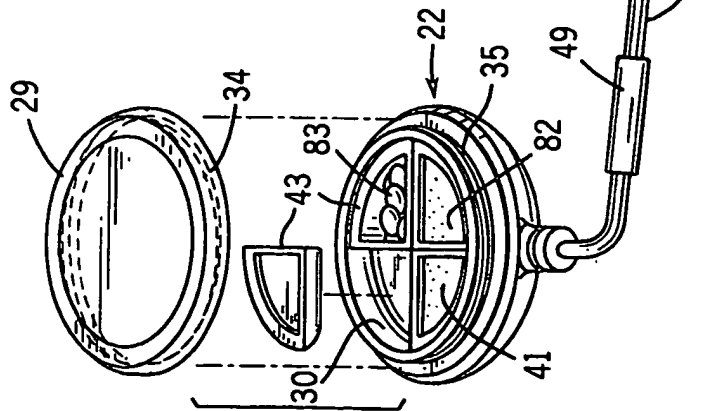


FIG. 16

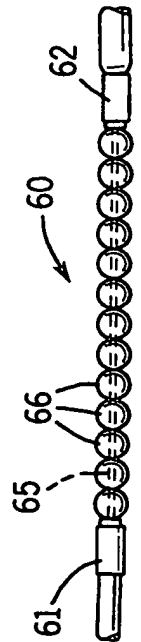
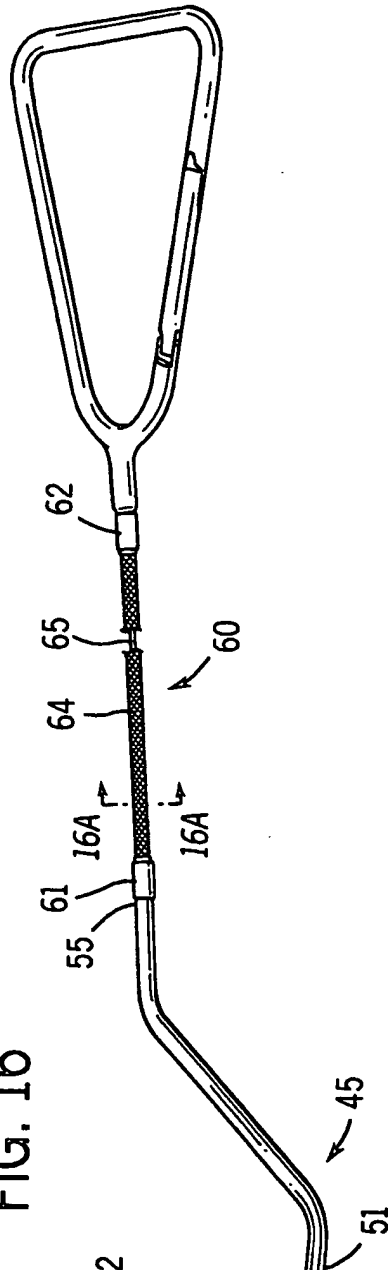


FIG. 17

PURSE HANGER  
SHELLY LENNA BAUERLY  
BAUERLY 00100  
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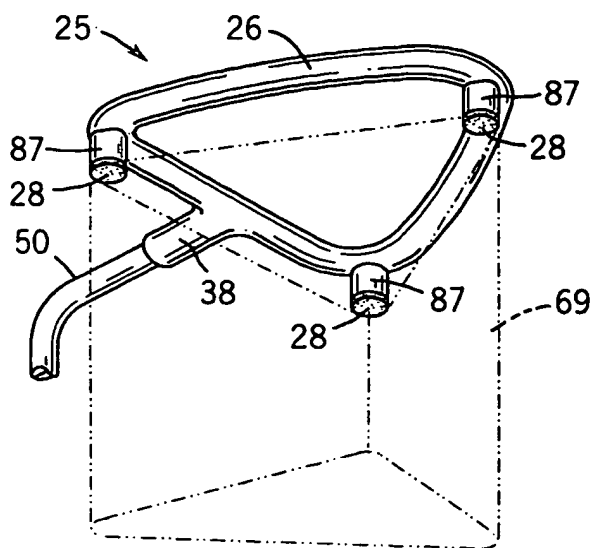


FIG. 18

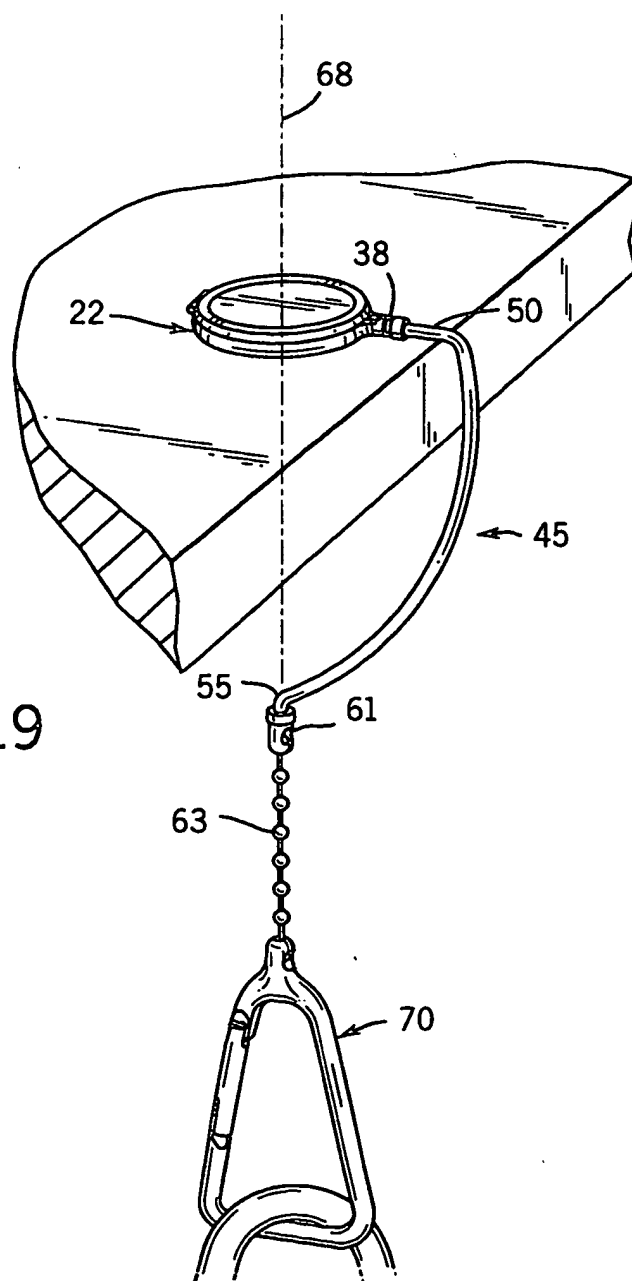


FIG. 19



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/763,426

01/23/2004

Shelly Lenna Bauerly

Bauerly 00100

6800

66842

7590

01/10/2008

Law Office of Ronald Shea  
2540 Country Hills Rd  
Apt. 192  
Brea, CA 92821

EXAMINER

LE, TAN

ART UNIT

PAPER NUMBER

3632

MAIL DATE

DELIVERY MODE

01/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



**Office Action Summary**

Application No.

10/763,426

Applicant(s)

BAUERLY, SHELLY LENNA

Examiner

Tan Le

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-32,35-39 and 41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9,19,20,29-32,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28,37-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's reply filed 10/11/07 is acknowledged. Claims 1-2, 4-32, 35-39 and 41 are currently pending. Claims 3, 33-34 and 40 had been canceled. Claims 5-9, 19-20, 29-32 and 35-36 had been withdrawn.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25, 37-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1 and 22, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising a rigid interface member defining a planar interface area (12); a rigid arm with a proximal segment terminating at proximal end 19, a distal segment 20, 21, 22, 23, 15) terminating at distal end 21, 22, 23, 15, a centrally extension ( a bend or curve between 13 and 20) disposed between proximal segment and a distal segment. wherein the proximal end is coupled with the rigid interface member, the proximal end being in a orientation substantially parallel to the planar interface area and curving into the central extension, and wherein the central extension curves into the distal segment which extends vertically downward (20) from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as

segment (21, 22, 23, 15 upon which a handbag, purse or the like can be supported or secured).

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end (at the v-shaped) of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop; and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

AS to claims 37-38, claims 37-38 recited limitations similar to claims 1 and 22, except that the central extension in this case is element 20.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical

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Page 6

extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

474

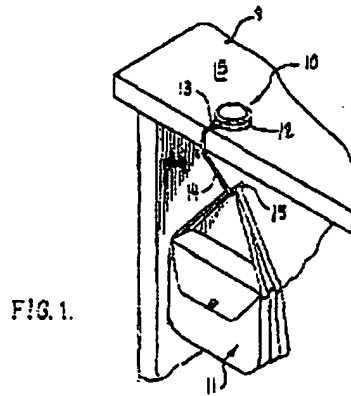


FIG. 1.

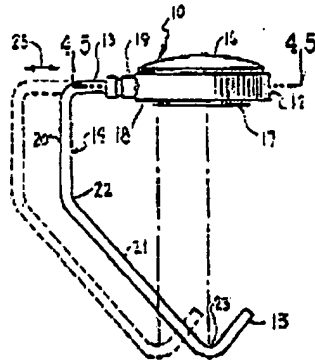


FIG. 2.

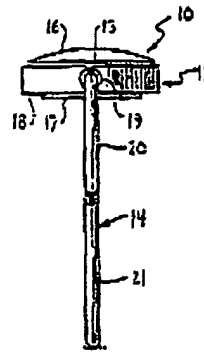


FIG. 3.

***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 10/11/07 have been fully considered but they are not persuasive.

The crux of the arguments are: "neither Lurie nor Omura disclose or suggest "the central extension curves downward to form the distal segment that extends vertically downward" and "neither Lurie or Omura disclose or suggest an apparatus wherein the distal ends is, or even can be positioned vertically beneath the planar interface area." (page 10) This is not deemed to be persuasive. As stated in the rejection above, Lurie teaches the central extension curve (between elements 13 and 20) and the distal segment 20 that extends vertically downward. Lurie also teaches the distal end 22, 21, 23, 25 and the distal end positioned vertically (at point 23) beneath the planar interface area.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran.

Applicant's argument appears to be attacking individual reference while the rejection is based on the combination. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.



In the instant case, Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. In addition, Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. The combination of Lurie and Omura and Sheeran would have suggest the subject matter of claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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Page 10


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. .


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818.

The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
AMY J. STERLING  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600

Tan le   
January 3, 2008.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,426	01/23/2004	Shelly Lenna Baucly	Baucly 00100	6800

66842 7590 09/28/2007  
LAW OFFICES OF RONALD SHEA  
2450 COUNTRY HILLS RD , APT . 192  
BREA, CA 92821

EXAMINER
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LE, TAN

ART UNIT	PAPER NUMBER
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3632

MAIL DATE	DELIVERY MODE
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09/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/763,426		BAUERLY, SHELLY LENNA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Tan Le		3632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-32 and 35-41 is/are pending in the application.
- 4a) Of the above claim(s) 5-9,19,20,29-32,35 and 36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,10-18,22-25,27,28 and 37-41 is/are rejected.
- 7) ☒ Claim(s) 21 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/22/07 and 7/28/07 have been entered.

Claims 1-2, 4-32, 35-41 are currently pending. Claims 3 and 33-34 have been canceled. Claims 5-9, 19-20, 29-32 and 35-36 were withdrawn.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-2, 4, 10-11, 13-18 and 22-25 and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent No. 2,253,998 to Lurie et al. in view of JP 10-113275 to Omura.

As to claims 1, 22, 37 and 40, Lurie et al teaches hanger device for hanging handbags, purses or the like (Figs. 1-4) from a horizontal surface, comprising the limitations as follows: a rigid interface member defining a planar interface area (12); a rigid arm (14, Fig. 1) with a centrally extension disposed between proximal end and a

distal end (the central extension which has at least one bend in a direction different from the proximal end and in a direction different from proximal end), wherein the proximal end is coupled with the rigid interface member in a orientation substantially parallel to the planar interface area, and wherein the distal end extends downward from the central extension when the distal end is positioned vertically beneath the planar interface area. Note that the distal end in this case, the examiner considers as a hook segment (V-shaped) 23, 15 upon which a handbag, purse or the like can be supported or secured.

The Lurie device differs from claim 1 of the present invention in that it is not provided with a flexible member with a first end coupled to the distal end of the rigid arm, and a second end coupled to a purse engagement member.

Omura teaches the concept of such, Omura teaches the hanger device with a flexible member (6) having a first end coupled to the distal end of the rigid arm (3) and a second end coupled to a purse engagement member (8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a flexible member with a first end coupled to the distal end of the rigid arm and a second end coupled to a purse engagement member as in Omura on the hook of Lurie in order to allow a user to hang the type of the purse where there is no full top closure of the interior of the purse and to provide a configuration which to be easily opened/closed and/or attached/detached (Omura, abstract).

As to claim 2, Lurie as modified also teaches the distal end of the rigid arm being oriented vertically beneath the geometric center of said planar interface area.

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As to claim 4, Lurie et al. as modified also teaches the rigid arm being swivelably coupled (5) with the rigid interface member.

Continuing to claims 10-11 and 38, Lurie et al as modified also teaches the rigid arm comprising a horizontal extension (13) (Fig. 2), which is parallel with the planar interface area; and the rigid arm having a vertical extension (20) that is substantially perpendicular to said horizontal extension.

As to claim 13, Lurie et al as modified also teaches first end of the flexible member (6, Omura) being coupled to the distal end of the rigid arm by a swivel joint (7). Note that the examiner considers the ring 7 of Omura is a swivel joint since the ring 7 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claim 14, Lurie et al as modified also teaches the second end of the flexible member being coupled to the purse engagement member by a swivel joint (Omura, 9). The examiner also considers the ring 9 of Omura is a swivel joint since the ring 9 of Omura is capable of turning or pivoting allowing the flexible member and thus the handbag/purse to turn around in a horizontal plane.

As to claims 15-16, the purse engagement member (8) of Omura as modified is also a rigid loop, a single continuous loop (when the engagement member is closed).

As to claims 17-18, wherein the rigid loop is a formed from a movable loop member (8) movably engaged to a primary loop member (the remained loop) wherein, when the movable loop member is in a first position, the rigid loop is a closed loop, and when the movable loop member is in a second position, the rigid loop is an open loop;

and wherein the movable loop member is movably engaged to the primary loop member through a pivot (hinge member, no numeral)

As to claim 23, which recites the flexible member as being at least one inch long, which also appears to read on Omura. Nevertheless, it would have been an obvious matter of design choice for one of ordinary skill in the art to dimension the flexible member to be at least one inch long producing no new and unexpected results.

As to claims 24-25, Claims 24-25 recited limitations similar to those recited in claims 15-17, which also read on Lurie as modified.

As to claim 39, Lurie et al as modified also teaches at least one bend (at 22 for example) within the rigid arm, which comprises a large progressive curve.

As to claim 41, Lurie et al as modified also teaches the horizontal extension of the rigid arm is swivelably coupled to the rigid interface member (12, 18) while rigidly fixed along a horizontal line relative to the rigid interface member.

Claims 12 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lurie et al. in view of Omura and further in view of US Pub. No.2004/0195484 to Sheeran.

Lurie et al. in view of Omura teaches substantially as claimed except that is not provided with a lengthening means for altering the length of the vertical extension wherein the lengthening means comprises a turnbuckle.

Sheeran teaches such concept. Sheeran teaches a vertical extension of the rigid arm having a lengthening means for altering or adjusting a length of the vertical



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extension (Fig. 6c, for example) wherein the lengthening means is in the alternative form of a turnbuckle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lengthening means as in Sheeran on the vertical extension of Lurie et al as modified so as to provide the vertical arm, which can be rotated, adjusted or extended in length in order to allow the hanger to be positioned on a wider variety of surfaces having varying degrees of thickness. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

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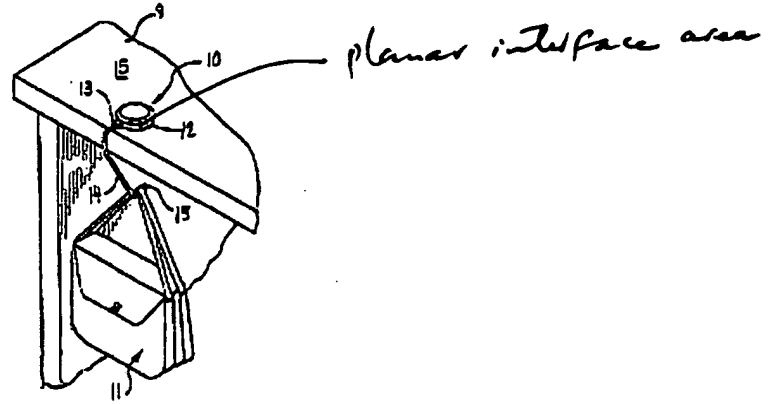


FIG. 1.

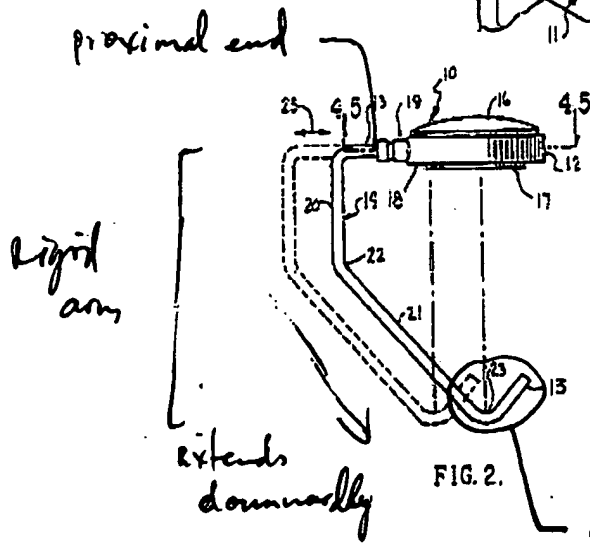


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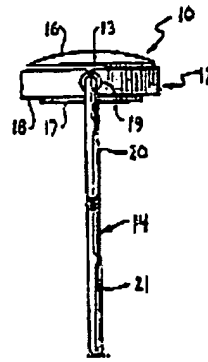


FIG. 3.

***Allowable Subject Matter***

Claims 21 and 26 are objected to, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed 7/28/07 have been fully considered but they are not persuasive.

Regarding Applicant's argument that neither Lurie nor Omura disclose or suggest "a rigid arm with a proximal end coupled with the rigid interface member in an orientation substantially parallel to the planar interface area, and wherein the distal end extends' downward from the central extension when the distal end is' positioned vertically beneath the planar interface area." "The rigid arm of Lurie bends at an upward angle, and Omura does not disclose or suggest an embodiment wherein the rigid arm locates beneath the planar interface area. Therefore, even if Omura and Lurie could somehow be combined in a manner suggested by the Examiner", this is not found persuasive. As stated in the rejection, Lurie alone clearly teaches substantially all the limitations with the distal end extends downward from the central extension. The examiner considers the "V-shaped portion" (see attached figure) at the end of the rigid arm is the distal end, which considers positioned vertically said planar interface area, whereas the V-shaped distal end portion function as a hook or securement member.

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Omura teaches a flexible member coupled to the securement member. The combination of Lurie and Omura would have suggested the subject matter of independent claims 1, 22 and 37. Nevertheless, assuming an argument that even if Lurie does not teach a securement member, but Omura teaches a securement member, the combined teachings of Lurie with Omura still render the claims obvious. Therefore, the rejection of these claims is still maintained.

Regarding Applicant's argument with respect to claims 12 and 27-28 which have been rejected under 103(a) as being unpatentable over Lurie in view of Omura and further in view of Sheeran, Applicant's argument as indicated on page 12 of the Remarks appears to be not directed to what the rejection has been set forth. Sheeran has applied for the teaching of providing a lengthening means to make the vertical extension adjustable. It should be noted that there is no requirement for a secondary reference to meet every limitation of the claim before it can be utilized. It should also be noted one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In the instant case, the combination of Lurie and Omura and Sheeran would have suggest the subject matter of independent claims 12, 27 and 28. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vertical extension adjustable since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. The rejection of these claims is therefore also maintained.


**Conclusion**

**THIS ACTION IS made NON FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Le whose telephone number is (571) 272-6818. The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Tan Le  
September 22, 2007.

  
Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600

(12) **UK Patent Application** (19) **GB** (11) **2 253 998** (13) **A**  
 (43) Date of A publication 30.09.1992

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(22) Date of filing 23.05.1991

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(32) 25.03.1991

(33) US

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(51) INT CL<sup>6</sup>  
**A47B 97/00, A47G 25/08**

(52) UK CL (Edition K)  
**A4L LAL L1002 L120 L305 L704**

(56) Documents cited  
**GB 1290629 A**

(58) Field of search  
 UK CL (Edition K) **A4L LAH LAL LBBA**  
 INT CL<sup>6</sup> **A47B, A47G**

(54) **Hanger device**

(57) A hanger device for supporting handbags, purses, umbrellas and the like from a table top or counter comprises a housing 12 to be supported upon a table top or counter. An elongated support shaft 13 is slidably disposed within the housing in parallel spaced relation to the table top or counter. The support shaft depends downwardly from the plane of the housing into a support arm 14, the support arm being deflected into a hook 15. The upper edge of the hook is disposed beneath the housing at a position determined by the slidable relationship between the support shaft and the housing.

**FIG. 1.**

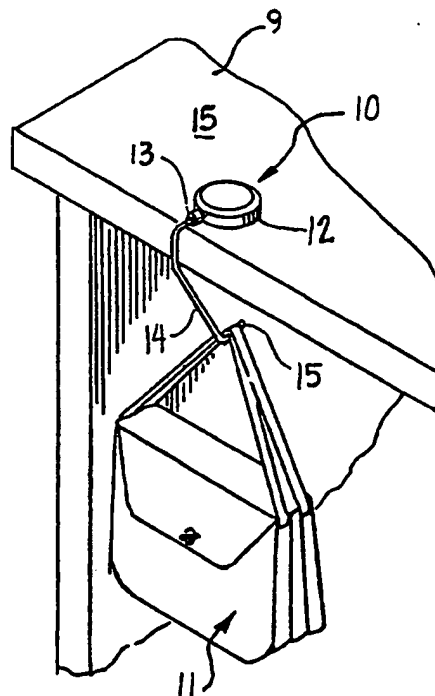


FIG. 1.

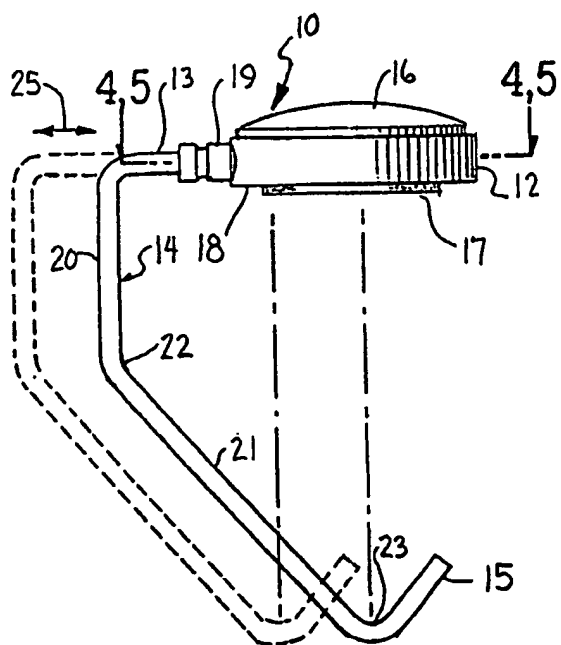
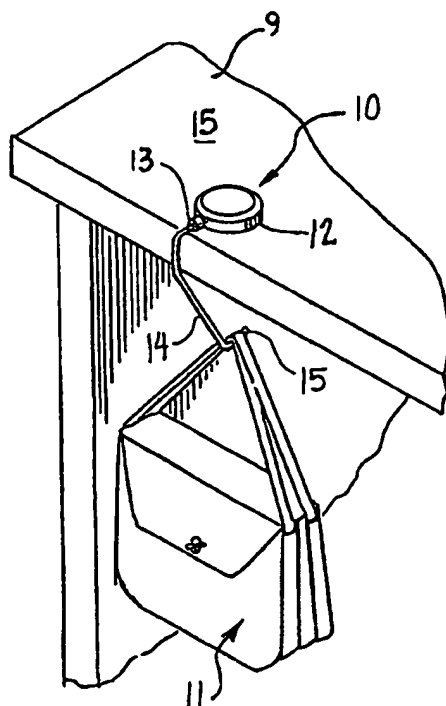


FIG. 2.

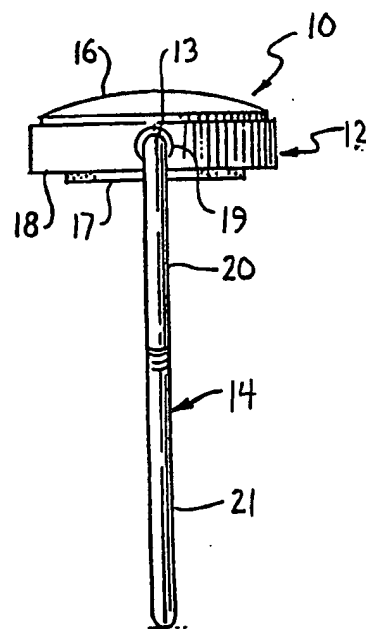


FIG. 3.

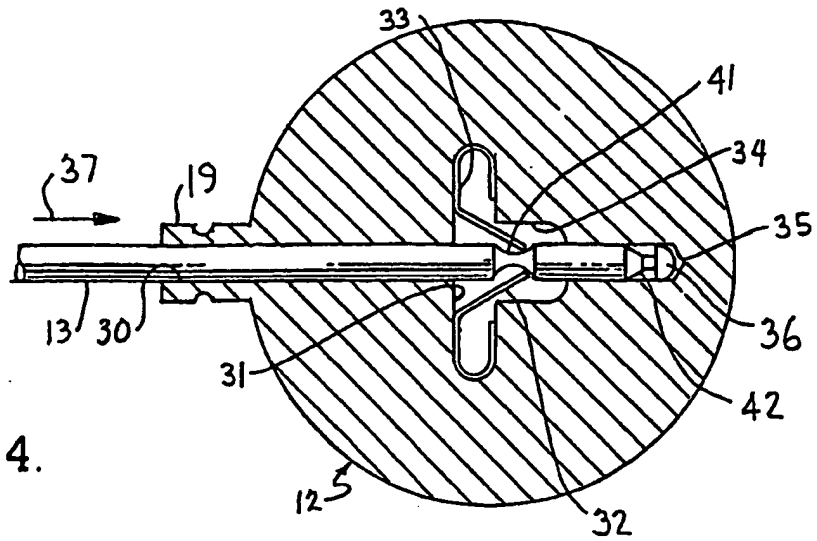


FIG. 4.

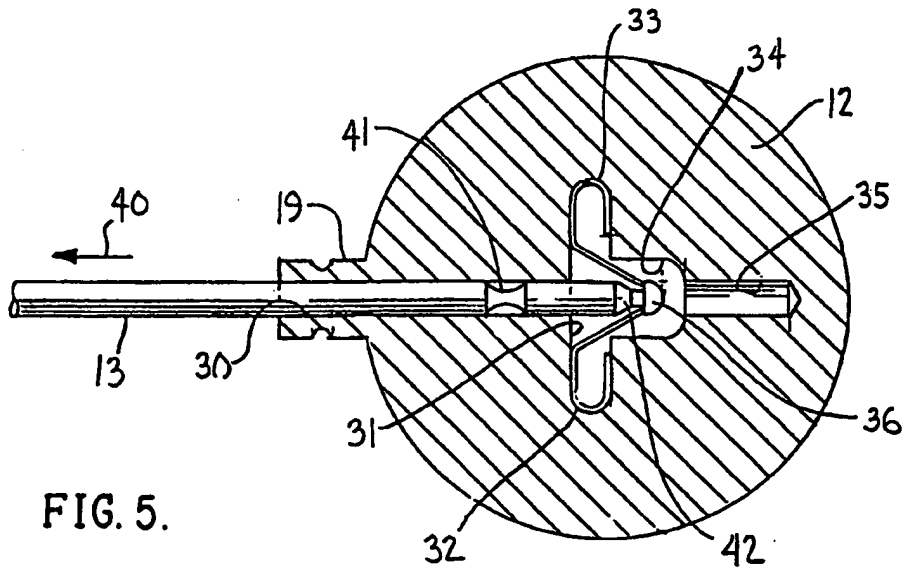


FIG. 5.

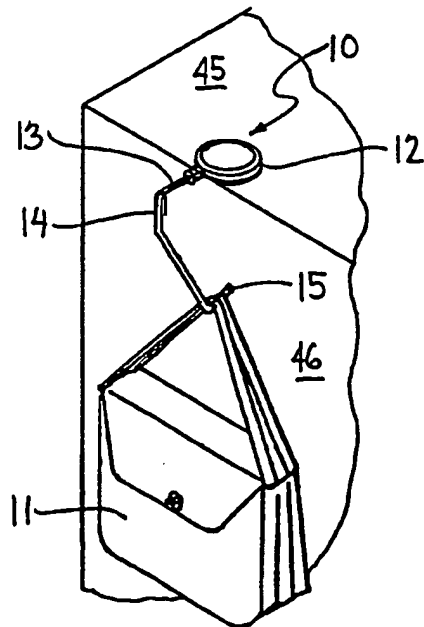


FIG. 6.



- 1 -

HANGER DEVICE

The present invention generally relates to supporting devices and more particularly to devices for use in hanging handbags, umbrellas and the like from tables and counter tops.

There has long been a problem experienced by persons who are carry handbags, umbrellas or other small parcels when dining, attending meetings or at other occasions where it is necessary to maintain possession of the item. The most apparent problem arises when men or women are dining in restaurants and are required by prudence to maintain purses or handbags in close proximity while dining. By necessity, the individual must usually place the handbag, purse or parcel on his or her lap, on a separate chair, on the table or on the floor. When the lack of space prevents convenient placement of the parcel, an individual is often forced to place the object on the floor thereby putting it in contact with dirt and subjecting it to theft.

A number of devices are taught by the prior art which seek to solve the problem addressed by the present invention. Examples of these devices are disclosed in United States Patent Nos. 4,194,714, 2,532,255 and 2,473,086. All of the devices taught by the prior art exhibit a similar problem which

is resolved by the present invention. The device taught in the '714 patent comprises a hanger for a purse having an elongated first arm, one end thereof to be placed on a table top, a second arm being hinged at an end of the first arm and being adapted to support the purse thereon. There is a fixed relationship between the arm which is supported by the table and the location which the purse, bag or parcel is supported. In the '255 patent, a substantially cylindrical housing is adapted for placement upon a table top or counter and includes a downwardly depending hook for support of the purse. Although the hook is provided with the ability to swing with respect to the housing, there is no ability to laterally displace the hook with respect to the supporting housing. The '086 patent comprises a structure which is substantially similar to that shown in the '255 patent. While providing the ability of the supporting hook to swing relative to a supporting plate, there is no ability to laterally displace the hook with reference to the supporting hook.

The devices taught by the prior art all exhibit an inherent problem which is resolved by the present invention. Irrespective of whether the supporting arm or hook can be swiveled or pivoted with respect to the supporting plate or housing, the inability to laterally displace the elements with reference to each other limits use of the devices to table tops or other surfaces having access beneath same. As an example, the

devices taught by the prior art cannot support a handbag or purse from a counter top which includes an adjacent, fixed vertical surface.

The present invention resolves those problems inherent in the designs in the devices taught by the prior art. A supporting housing is adapted to be placed upon the horizontal surface of a table top or counter. A supporting shaft horizontally extends from the housing and is in a slidable relationship therewith. The supporting shaft depends downwardly into a supporting arm and hook which is used to hold the handbag, purse or the like. By altering the position of the supporting shaft relative to the housing, the point upon which the handbag or purse is supported can be laterally displaced relative to the supporting housing. By fully displacing the supporting arm relative to the housing, the present invention provides the ability to hang a handbag, purse or the like from a counter or table top even where there is no spacial access beneath the counter or table top.

The present invention comprises a hanger device for hanging a handbag, purse or the like from a counter or table top. A cylindrical housing is adapted for secure placement upon the counter or table top. A supporting shaft is slidably disposed within the housing and extends therefrom in the plane of the housing. The supporting shaft is coupled within the housing to provide for a plurality of fixed positions. The supporting shaft

is slidably disposed within a positioning channel, the shaft including a predetermined number of selectable positions formed by tapered sections of reduced diameter along the supporting shaft. Resilient leaf springs are disposed on opposite sides of the supporting shaft within the housing. The springs are adapted to resiliently bear upon the shaft and secure supporting shaft at selected positions when in contact with the tapered sections. The portion of the supporting shaft extending from the housing depends downwardly into a supporting arm and hook from which a handbag, purse or the like can be hung. By slidably changing the position of the supporting shaft relative to the housing, the supporting hook can be laterally displaced relative to the housing.

It is therefore an object of the present invention to provide an improved hanger device for supporting handbags, purses and the like from a counter or table top.

It is another object of the present invention to provide a hanger device which can be used with counters or table tops having no special access beneath same.

It is still another object of the present invention to provide a hanger device for purposes, handbags and the like which can be easily stored.

It is still yet another object of the present invention to provide an improved hanger device which is simple and inexpensive to fabricate.

The novel features which are believed to be characteristic of the invention, both as to its organization and method of operation, together with further objectives and advantages thereof, will be better understood from the following description considered in connection with the accompanying drawing in which a presently preferred embodiment of the invention is illustrated by way of example. It is to be expressly understood, however, that the drawing is for the purpose of illustration and description only, and is not intended as a definition of the limits of the invention.

FIGURE 1 is a perspective view of the present invention hanger device being supported from a table top.

FIGURE 2 is a side elevation view of the present invention hanger device showing the alternative lateral positions of the supporting arm relative to the housing.

FIGURE 3 is a rear elevation view of the present invention shown in FIGURE 2.

FIGURE 4 is a partial cross-sectional view of the housing and supporting shaft taken through line 4-4 of FIGURE 2 illustrating a first position of the supporting shaft relative to the housing.

FIGURE 5 is a partial cross-sectional view of the present invention taken through line 5-5 of FIGURE 2 showing the supporting shaft in its second, extended position relative to the housing.

FIGURE 6 is a perspective view of the present invention hanger device being supported upon a surface having no spacial access there beneath.

An understanding of the present invention can be best gained by reference to FIGURE 1, the present invention hanger device being generally designated by the reference numeral 10. As shown in FIGURE 1, hanger device 10 is supporting a handbag 11. Hanger device 10 generally comprises a housing 12 from which extends a supporting shaft 13 which depends downwardly into a support arm 14. Support arm 14 is deflected upwardly into a hook 15 upon which handbag 11 is hung. As shown in FIGURE 1, housing 12 rests upon table top 15 with hook 15 supporting handbag 11 beneath table top 15. As will be explained, the present invention hanger device 10 provides for use thereof with tables or counters which do not provide for spacial access beneath the top surface thereof (FIGURE 6).

The structure of the present invention can be best understood by reference to FIGURE 2 and FIGURE 3. The present invention hanger device 10 comprises a cylindrical housing 12 having upper and lower planar surfaces. The interior coupling between support shaft 13 and housing 12, as shown in FIGURE 4 and FIGURE 5, is enclosed by cover 16 which is capable of having decorative indicia disposed thereon. The lower planar surface of housing 12 comprises a resilient pad 17 which can be fabricated from rubber or a polyurethane foam. Pad 17 is used to provide

traction and thereby maintain placement of housing 12 on table top 15. In addition, resilient pad 17 provides a protective layer to prevent defacing table top 15.

As shown in FIGURE 2, support shaft 13 extends outwardly from sleeve 19 in parallel spaced relation to the lower planar surface 18 of housing 12. Support shaft 13 depends downwardly forming support arm 14 which is in a planar relationship with support shaft 13 (FIGURE 3). Support arm 14 is comprised of segments 20, 21 and hook 15. Segment 20 of support arm 14 is perpendicular to support shaft 13. Support arm 14 is deflected at 22 separating segments 20 and 21 whereby segment 21 of support arm 14 is oriented beneath housing 12. Segment 21 of support arm 14 depends upwardly at 23 forming hook 15 upon which a handbag, purse or the like can be supported (FIGURE 1).

In order to meet the objectives of the present invention, support shaft 13 is coupled through sleeve 19 to housing 12 in a manner which provides for lateral movement thereof in the direction designated by reference numeral 25 (FIGURE 2). As shown in FIGURE 2, the range of movement represented by reference numeral 25 allows hook 15 to be laterally displaced and thereby change the center of gravity of a supported object relative to housing 12. The means to slidably structure couple support shaft 13 within housing 12 can be best understood by reference to FIGURE 4 and FIGURE 5. FIGURE 4 represents the orientation of support arm 14 as shown in solid lines in FIGURE 2. FIGURE 5 represents the orientation of support arm 14 as shown in phantom

lines in FIGURE 2. As shown in FIGURES 4 and 5, a central channel 30 is disposed through sleeve 19 and extends diametrically into the central core of housing 12. A perpendicular cross-bore 31 extends equally on either side of channel 30 and is adapted to receive biased leaf springs 32 and 33. Beyond cross-bore 31, channel 30 extends into expansion channel 34 which is adapted to accommodate the biasing ends of leaf springs 32 and 33. Finally, channel 30 is extended through housing 12 into channel extension bore 35 to accommodate the terminus 36 of support shaft 13 when moved to the position indicated by reference numeral 37.

Support shaft 13 is a cylindrical member, one end thereof depending downwardly to support arm 14, the opposite terminus 36 limiting the extended movement of support shaft 13 when moved in the direction indicated by reference numeral 40 (FIGURE 5). To meet objectives of the present invention, support shaft 13 can be moved in a range between two alternative positions designated by reference numeral 25 (FIGURE 2). The positional movement of support shaft 13 is defined by a pair of annular depressions 41 and 42 formed along support shaft 13 about the axis thereof. As stated, FIGURE 4 represents the position of support arm 14 as shown in solid line in FIGURE 2. In this position, the distal ends of leaf springs 32 and 33 are biased placing the distal ends thereof in forced contact with annular depression 41. FIGURE 5 illustrates the altered position of support arm 14 represented in FIGURE 2 in phantom lines. In this



position, the biased force imposed by the distal ends of leaf springs 32 and 33 place them in forced contact within annular depression 42. As stated, an objective of the present invention is to provide a hanger device 10 which can be easily stored. Based on the cylindrical profile of support shaft 13, support arm 14 can be rotated about the axis of support shaft 13 and relative to housing 12 as represented by the directional reference 43 (FIGURE 3). In this manner, when the present invention hanger device 10 is to be stored, support arm 14 can be rotated until it lies in the same plane as housing 12 thereby producing a substantially flat and easily storable structure.

Use of the present invention can be understood by reference to FIGURES 1 and 6. As stated, FIGURE 1 illustrates the support of a handbag beneath a table top 15 having spacial access there beneath. In this position, support arm 14 is in the closed position (FIGURE 4), hook 15 being substantially in alignment with housing 12. In FIGURE 6, hanger device 10 is supported upon a table top or counter 45 which has no spacial access beneath same as a result of an integral, vertical wall 46. Under these conditions, support shaft 13 and support arm 14 are urged in the direction designated by reference numeral 40. This displaces hook 15 relative to housing 12 in a manner which permits handbag 11 to be supported on hook 15 irrespective of the lack of spacial access beneath table top or counter 45.

CLAIMS:

1. A hanger device for hanging an object from a table top comprising:

(a) a housing having a substantially planar lower surface adapted to rest upon the table top and a central bore disposed therethrough in parallel spaced relation to the lower surface thereof, the axis of said central bore bisecting the housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of positional depressions disposed in the surface of said support shaft, one of said positional depressions being substantially adjacent the first end of said support shaft;

(c) biasing means for engaging said positional depressions in the surface of said support shaft coupled within the central bore of said housing and in biased contact with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

2. A hanger device as defined in Claim 1 wherein said housing is cylindrical, the central bore therethrough being aligned along the diameter of said housing.

3. A hanger device as defined in Claim 1 wherein said support arms depend from said support shaft in a perpendicular relationship thereto.

4. A hanger device as defined in Claim 1 wherein said support shaft has two positional depressions formed therein, each being disposed about the full circumference of said support shaft.

5. A hanger device as defined in Claim 1 wherein said biasing means comprises two leaf springs having a distal end adjacent with and in forced contact with said support shaft.

6. A hanger device as defined in Claim 1 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

7. A hanger device as defined in Claim 1 further including a rubber pad secured to the planar lower surface of said housing.

8. A hanger device for hanging an object from a table top comprising:

(a) a cylindrical housing having a substantially planar lower surface adapted to rest upon the table top and the central bore diametrically disposed therethrough in parallel spaced relation to the lower surface of said housing;

(b) a support shaft having first and second ends slidably coupled within the central bore of said housing and being coaxial therewith and having a plurality of spaced, positional depressions annularly disposed along the surface of said support shaft, one of said annular, positional depressions being substantially adjacent the first end of said support shaft, said support shaft being rotatable through 360° of arc about its own axis;

(c) biasing means for engaging said annular, positional depressions coupled within the central bore of said housing and in bias contacted with said support shaft; and

(d) a support arm depending downwardly from the second end of said support shaft and being perpendicular thereto, said support arm being deflected into a hook member, said support shaft, support arm and hook member being in a planar relationship with one another.

9. A hanger device as defined in Claim 8 wherein said support shaft has two annular, positional depressions formed therein.

10. A hanger device as defined in Claim 8 wherein said biasing means comprises two leaf springs, each having a biased distal end adjacent with and in forced contact with said support shaft.

11. A hanger device as defined in Claim 8 further including a covering member disposed upon said housing enclosing said central bore and including means for receiving decorative indicia thereupon.

12. A hanger device substantially as hereinbefore described and with reference to the accompanying drawings.

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DERWENT-WEEK: 199828

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TITLE: Hanger for e.g. handbag, umbrella - uses  
flexible chain  
for connecting cuff-like clip and suspended  
tool, such  
that suspended tool is rotatable from support  
board up to  
90 degrees

PATENT-ASSIGNEE: OMURA Y[OMURI]

PRIORITY-DATA: 1996JP-0305409 (October 14, 1996)

PATENT-FAMILY:

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INT-CL (IPC): A47G029/00

ABSTRACTED-PUB-NO: JP 10113275A

BASIC-ABSTRACT:

The hanger has a bearing (2) provided at the lower surface of a support board  
(1). A suspended tool (3) is connected to the support board via a shaft (5).

The shaft limits the rotation range of the suspended tool up to 90 degrees. A  
cuff-like clip (8) for holding a load e.g. handbag is attached to the suspended  
tool via a flexible chain (6).

ADVANTAGE - Reduces impact on body by which load collides by hanging

load on  
clip via flexible chain.

CHOSEN-DRAWING: Dwg.1/6

TITLE-TERMS: HANGER HANDBAG UMBRELLA FLEXIBLE CHAIN CONNECT CUFF CLIP  
SUSPENSION TOOL SUSPENSION TOOL ROTATING SUPPORT BOARD UP  
DEGREE

DERWENT-CLASS: P27

SECONDARY-ACC-NO:

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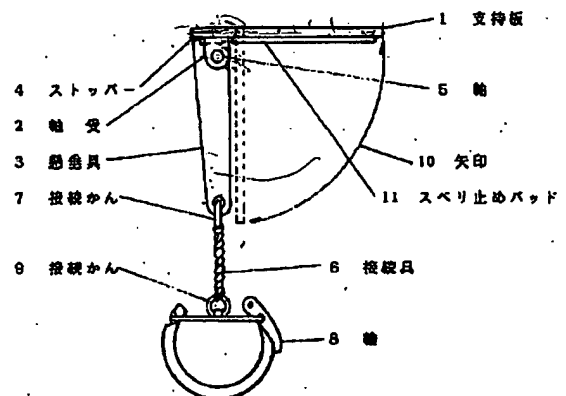
埼玉県川口市元郷5丁目22番20号

(54) 【発明の名称】 ハンガー装置

(57) 【要約】

【課題】 テーブル又はカウンターの上面からハンドバッグなどを吊り下げるためのハンガー装置を提供する。

【解決手段】 支持板1と懸垂具3は折畳める様に接続し、柔軟性の有る細長い接続具6と容易に開閉、着脱出来る構造の輪8により、荷に取付けたまま携帯する。使用する時には、輪8により荷に取付けてあるハンガー装置の、定められた角度以上には開かない様に接続してある支持板1と懸垂具3により、テーブル又はカウンターの上面からハンドバッグなどの荷を吊り下げる。荷に取付けた輪8の位置が不適切なときには、これを取り外して、簡単に変えることができる。





## 【特許請求の範囲】

【請求項 1】支持板1の下面に設けられた軸受2により、90°以上には開かないように、軸5で接続した懸垂具3の端部に、自在に回転したり曲がること出来る柔軟性の有る細長い接続具6により接続された輪8、を備えたハンガー装置。

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】この発明は、ハンガー装置に関するものであり、特に、テーブルやカウンターの上面から、ハンドバッグや傘等の荷を掛けるための装置に関する。

## 【0002】

【従来の技術】ハンドバッグや傘等の荷を持って居る者が、食事や会合などで、テーブルを使用する時に、それらの荷を、膝、椅子の後ろ、テーブルの上、或は床に置いたりしているが、邪魔になったり、安全性に問題が生じるのは周知の事である。

【0003】本問題を解決するための各種装置が従来提供されているが何れも硬直的な構造を持っており、その携帯には必ずしも便利とはいえない。

## 【0004】

【発明が解決しようとする課題】本発明は、これらの欠点を除いて携帯に負担を感じない様にするものである

## 【0005】

【課題を解決するための手段】今その解決手段を図面を追いつながり説明すれば、(イ)支持板1と懸垂具3を固定的な形状としないで、定められた角度以上には開かない様に接続し、(ロ)懸垂具3の端部から、柔軟性の有る細長い接続具6により接続された輪8を備える。

(ハ)接続具6により懸垂具3に接続された輪8は、容易に開閉、着脱出来る構造のもので、必要に応じ、ハンドバッグや傘等に取付けたまま、又は、取外して使用に供する構造を備えている。

## 【0006】

【発明の実施の形態】本発明は、以上のような形態であるから、これを使用するときは、支持板1と懸垂具3を折畳んだ状態で、輪8を使用してハンドバッグや傘等の荷に取付けて携帯する。ハンガー装置が必要なときは、折畳みである支持板1と懸垂具3がストッパー4が当るまで開いてからテーブルや、カウンターの上面に支持板1を引っ掛けて、ハンドバッグや傘等の荷を吊り下げる。ハンドバッグや傘等の荷に取付けた輪8の位置が不適切なときには、これを取外して、改めて適切な所に変える。

【0007】尚、本発明の実施に当たって次の如きことが出来る。

(イ)支持板1は矩形の他に、円形、楕円形又は多角形など、十分な静止摩擦力が有れば良い。

(ロ)接続具6は柔軟性が有れば繊維製の紐でも、金属又は樹脂類の鎖でも良く、接続かん7及び接続かん9は使用しないで、直接に接続具6と懸垂具3及び輪8を接続してもよい。

(ハ)輪8は、必ずしも図1の様な形でなくても、着脱が容易で有れば、他の形状でも良いし、単に針金を2-3回巻いた様な物でも良い。

10 (ニ)ハンドバッグや傘等の荷の、ハンドルや紐に取付けて携帯するので、支持板1の上面に装飾的な図柄やイニシャル等を施せば本人の持物である事の確認に役立ち、アクセサリにもなる。また、企業などの宣伝用ロゴを入れて宣伝媒体とする事も出来る。

(ホ)スベリ止めパッド11を支持板1の下面に付ければ、静止抵抗を増幅できるので、より一層の安定性が増す。

## 【0008】

【発明の効果】テーブルや、カウンターの様に、脚部が卓端より引っ込んでいる場合図4でも、垂直な壁面の所図5でも何等の故障なく使用出来る。ハンドバッグや傘等の荷に体などが接触しても、荷は柔軟性の有る接続具6で吊り下げられて居るので支持板1に加わる衝撃力は減衰して安全に使用出来る。

## 【図面の簡単な説明】

【図1】本発明の立面図

【図2】本発明の平面図

【図3】本発明の側面図

30 【図4】脚部が卓端より引っ込んでいるテーブルの上面に置いた本発明の斜視図

【図5】壁面が垂直なカウンターなどの上面に置いた本発明の斜視図

【図6】ハンドバッグのハンドルに取付けて携帯する時の本発明の斜視図

## 【符号の説明】

1は支持板

2は軸受

3は懸垂具

4はストッパー

5は軸

6は接続具

7は接続かん

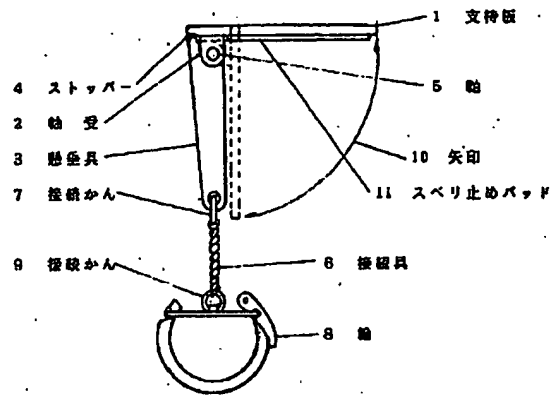
8は輪

9は接続かん

10は回転の範囲を示す矢印

11はスベリ止めパッド

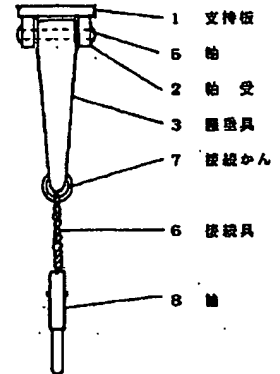
【図1】



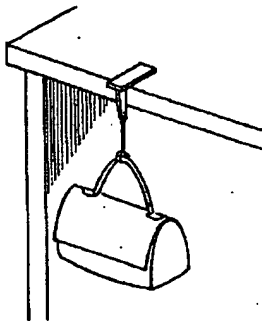
【図2】



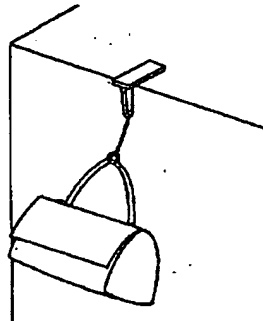
【図3】



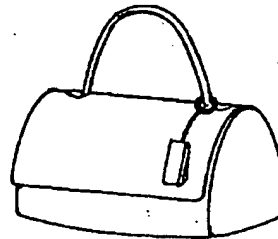
【図4】



【図5】



【図6】





IN THE UNITED STATES PATENT OFFICE

In Re Patent Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

Group Art Unit: 3632

Examiner: Le, Tan

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF TRANSLATION**

I, Kaoru Sugimura reside at 4283 Murietta Avenue #3 Sherman Oaks, CA 91423 in the county of Los Angeles. I prepared the attached translation of Japanese Patent 10-113275 to Omura, cited by the Examiner as prior art in the prosecution of the referenced Patent Application No. 10/763,426. I hereby affirm that the attached translation is a true and accurate translation, and that I am knowledgeable in the languages of Japanese and English.

I hereby acknowledge that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. § 1001) and may jeopardize the validity of the Application or any patent issuing thereon.

Respectfully submitted,

Date 3/12/06

  
Name

### **1<sup>st</sup> Page Summary (Abstract)**

A hanger device is offered to hang the handbag and the like from the surface of a table or the counter. Support board 1 and suspension member 3 can fold between the open and closed positions while a load is detachably secured within structural loop 8, which is secured to flexible splicer 6. The load such as handbags is hung from the upper surface of the table or the counter with support board 1 and suspension tool 3 connected so as not to open more than the provided angle of the suspender device installed in the load by loop 8 when using it. It is possible to shift position easily by detaching this when one of the loops 8 installed in the load is improper.

Reference Characters and corresponding Element names on First Page Drawing:

1. Support: backing
2. Bearing :ball, shaft
3. Iron bar
4. Stopper
5. A pivot
6. Connection tool, joining, link, connect, a junction ,conjunction
7. Connection link: ring, link, handle
8. Ring loop, hoop, ring, circle, wheel
9. Connection link
10. arrow
11. Stopper pad-a device to prevent slipping, skidding

(2)

Because of number 2 this system does not open more than 90 degrees

On the edge of number 3 there is a connection tool,6, which is flexible and connects with number 8.

001

This invention offered is a hanger system which makes it easy to hang handbags or umbrellas on table tops or counters.

002

People who have handbags or umbrellas when going to meetings or restaurants have to place the items on lap or chair. This is an obstacle. There is also a problem with safety.

003

Other similar inventions are not portable.

004

This eliminates the others and is portable

005

Now to explain with the pictures.

Number 1 and 3 can open but not more than 90 degrees. On the edge of number 3 there is a connection tool, 6, which connects with number 8. Number 8 is very easy to open and close. When necessary you can use with handbags or umbrella.

006

When you carry it, number 1 and 3 are closed and number 8 connects to handbag or umbrella. When in use, number 1 and 3 are open until stopper number 4 touches the table top or counter. You hang number 1 on the top of the table and if number 8 is unsuitable you can move it.

007

Number 1 support bar can be round or a polygon or an oval, any style. You just need enough stillness friction. Number 6 can be fabric or metal or a resin-treated chain. It is not necessary to have number 7 or number 9. You can connect number 6 and number 3 and number 8 directly. Number 8 can be different shapes if they are easy to open and close. It can be wire. If you decorate top of number 1 support bar with initials or design.

You can identify personal items or use as an accessory. You can decorate with company logo as a novelty or to advertise your company. If you put a stopper pad underneath the support bar it will be more stable.

008

If as in picture number 4, the table has open space, or in picture number 5, has a vertical wall, you can use without problem. If anything touches the handbag or umbrella, because of flexible chain number 6 holding them, the support bar will receive less shock.

Page (3) pictures

1. elevation
2. plane, level
3. side view
4. table with space
5. vertical counter
6. picture when you carry with a handbag



# Merriam- Webster's Collegiate<sup>®</sup> Dictionary

TENTH EDITION

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**dis-so-lu-tion** \di-sə-'lū-shən/ *n* (14c) 1: the act or process of dissolving; as: separation into component parts **b** (1): DECAY, GRADATION (2): DEATH **c**: termination or destruction by down, disrupting, or dispersing (the ~ of the republic)... **d**: dissolving of an assembly or organization **e**: LIQUEFACTION 2: lute act or practice

**dis-solve** \di-'zolv, -'zolv also -'zāv or -'zōv/ *v* [ME; fr. L *dissolvere* + *solvere* to loosen — more at SOLVE] *v* (14c) 1 **a**: to cause to disappear **b**: DESTROY **b**: to separate into components **c**: DISINTEGRATE **c**: to bring to an end **d**: TERMINATE (~ par **d**: ANNUL (~ an injunction) 2 **a**: to cause to pass into solution (sugar in water) **b**: MELT, LIQUEFY (~ to cause to be moved) **d**: to cause to fade out in a dissolve 3 *archaic*: LOOSEN 4: to clear up (~ a problem) 5: to become ed or decomposed **b**: BREAK UP, DISPERSE **c**: to fade away become fluid **d**: MELT **b**: to pass into solution **c**: to be emotionally (~ dissolved into tears) **d**: to resolve itself as if by tion (hate dissolved into fear) **e**: to change by a dissolve (~ to a Victorian parlor) **dis-solv-able** \-zāl-və-bal, -'zōl-sol-vənt/ \-zāl-vənt, -'zōl-/ *n* or *adj.* = **dis-solv-er *n***

**dissolve** *n* (1916) : a gradual superimposing of one motion-picture television shot upon another on a screen

**dis-so-nance** \di-sə-'nɒnt(t)s/ *n* (15c) 1 **a**: lack of agreement or consistency between the beliefs one holds or between one's actions and one's beliefs — compare COGNITIVE DISSONANCE **b**: an inconsistency, inconsistency, or disagreement 2: a mingling of sounds; esp.: a clashing or unresolved musical interval or chord **dis-so-nant** \-nɒnt/ *adj* [MF or L; MF, fr. L *dissōnans*, *dissōnans* to be discordant, fr. *dis-* + *sonare* to sound — more at SOUND] (15c) 1: marked by dissonance 2: DISCORDANT 3: DISCORDANT 3: harmonically unresolved — **dis-so-nant-ly** *adv*

**dis-suade** \di-'swād/ *v* **dis-suad-ed**; **dis-suad-ing** [MF or L; *suadere*, fr. L *dissuadere*, fr. *dis-* + *suadere* to urge — more at SUADE] 1 **a**: to advise (a person) against something **b** *archaic*: to dissuade (an action) 2: to turn from something by persuasion — **dis-suad-er *n***

**dis-sua-sion** \di-'swā-'zhən/ *n* [MF or L; MF, fr. L *dissuasion*, fr. *dissuadere*] (15c) : the action of dissuading

**dis-sua-sive** \di-'swā-'siv, -'ziv/ *adj* (1609) : tending to dissuade — **dis-sua-sive-ly** *adv* — **dis-sua-sive-ness** *n*

**dis-syl-la-ble** \di-'si-lə-bal/ (.)di(s)-'si-, 'di-si-, (.)di-'si-/ *var* of **DIS-SYLLABLE**

**dis-sym-me-try** \(.)di(s)-'si-'mə-'trē/ *n* (1845) : the absence of symmetry — **dis-sym-me-tric** \(.)di(s)-'si-'mə-'trik/ *adj*

**dis-staff** \dis-'tɒf, *n* **pl** **distaffs** \-'tɒfs, -'tɒvz/ *n* [OE *distaf*, fr. OE *distaf*, fr. *dis-* (akin to MLG *dise* bunch of flax) + *staf* staff] (bef. 12c) 1 **a**: a staff for holding the flax, tow, or wool in spinning **b**: woman's work or domain 2: the female branch or side of a family

**distaff** *adj* (ca. 1633) : MATERNAL (the ~ side of the family) — compare SPEAR; also: FEMALE (~ executives)

**dis-tain** \dis-'tæn/ *v* [ME *disteynen*, fr. MF *deisteyndre* to take away the color of, fr. OF, fr. *des-* + *teindre* to dye, fr. L *tingere* to wet, dye — more at TINGE] (14c) 1 *archaic*: STAIN 2 *archaic*: DISHONOR

**dis-tal** \dis-'tɒl/ *adj* [*distant* + *-al*] (1808) 1: situated away from the point of attachment or origin or a central point esp. of the body — compare PROXIMAL 2: of, relating to, or being the surface of a tooth that is next to the tooth behind it or that is farthest from the point of the front of the jaw — compare **dis-tal-ly** \-tɒl-/ *adv*

**distal convoluted tubule** *n* (ca. 1901) : the convoluted portion of a nephron that lies between the loop of Henle and the collecting duct and that is concerned esp. with the secretion of urine

**dis-tance** \dis-'tɒnt(t)s/ *n* (14c) 1 *obs*: DISCORD 2 **a**: separation between two points or surfaces **b**: the degree or amount of separation between two points or surfaces **c** (1): an extent of area or an advance route measured linearly (2): an extent of space measured linearly (within walking ~) **d**: an extent of advance from a starting point **e**: EXPANSE **f** (1): length of a race or contest (won the ~) (2): the full length (as of a prizefight or ball game). (3): (~ training) 3: the quality or state of being distant: as: remoteness **b**: personal and esp. emotional separation; also COLDNESS **c**: DIFFERENCE, DISPARITY 4: a distant point 5 **a**: AESTHETIC DISTANCE **b**: capacity to observe dispassionately the distance **also** last the distance: to complete a course

**distance** *v* **dis-tanced**; **dis-tanc-ing** (1578) 1: to place or remove at a distance 2: to leave far behind: OUTSTRIP

**distance learning** *n* (1972) : learning that takes place via electronic means, as by television, radio, or computer, with the instructor and students who are not together in a classroom

**dis-tant** \dis-'tɒnt/ *adj* [ME, fr. MF, fr. L *distans*, *distans* to stand apart, be distant, fr. *dis-* + *stare* to stand — more at STAND] (14c) 1 **a**: separated in space: AWAY **b**: situated at a great distance: FAR-OFF **c**: separated by a great distance from each other (he is far behind (finished a ~ third) 2: separated in a relationship (he is ~ cousin) (the ~ past) 3: different in nature or character (he is ~ from me) 4: distant in time (he served an alford in personal relationship) COLD 5 **a**: going to a distant place (~ voyages) **b**: concerned with remote things (~ ~ ~) — **dis-tant-ly** *adv* — **dis-tant-ness** *n*

**dis-taste** \di-'tɒst-/ *v* (1592) 1 *archaic*: to feel aversion to; to dislike **dis-taste** *n* (1598) 1 *archaic*: dislike of food or drink **2**: DISINCLINATION (a ~ for opera) 2 *obs*: ANNOYANCE

**dis-taste-ful** \di-'tɒst-fəl/ *adj* (1607) 1: objectionable to one's personal taste: DISAGREEABLE 2: unpleasing to the taste: LOATHSOME — **dis-taste-ful-ly** \-fəl-/ *adv* — **dis-taste-fulness** *n*

**DISTILL** *v* [**dish-tl'**, -**fink**, **'dis-** / **n** (**Pag dishdelfink**, **distillate**)] **thistle + fink finch** (1939) : a traditional French motif in the form of a stylized bird  
**per** [**'dis-tem-pər**] *v* [**ME distempren**, fr. **L**] **sadly**, fr. **L dis- + tempere** (to temper) (14c)  
2 **archaic** : **DERANGE**; **UNSETTLE**  
**er** **n** (ca. 1555) : 1 : bad humor or temper  
2 : bodily state esp. of quadruped mammals :  
3 : contagious disease esp. of dogs that is caused by **Morbilivirus** and is marked by fever, leukopenia, intestinal, and neurological symptoms  
**DIS-TENT** [**'dis-ten(t)-shən**] *n (**L distensio**, fr. **Gk distēnō**) : 1 : ailment, disorder (politic)  
2 : **dis-tem-per-ate** \-(pə-)rət\ *adj*  
**er** **n** [obs. **distemper**, v., to dilute, mix to produce paint] **MF destemper**, fr. **L dis- + temperare** (1632)  
in which the pigments are mixed with an emulsion of oil  
or with white of egg as a vehicle and with colors  
and murals : 2 a : the paint or the preparatory process : b : a painting done in distemper-based paints  
**er** *v* (ca. 1873) : to paint in or with distemper  
**-er-a-ture** \-'dis-tem-(pə-)rə-chür-, pə(r)-'cl-shən\ *n* (1531) : a 'disordered condition'  
**DI-STEND** [**'di-stend**] *v* [**ME, fr. L distendere**, fr. **dis- + tendere**] (15c) : 1 : EXTEND : 2 : to enlarge  
**SWELL ~ vi** : to become expanded  
**syn** **distensible** \-'sten(t)-sə-bəl\ *adj* [**distens-** (fr. **L distendi**)] (ca. 1828) : capable of being distended  
**-ible** \-'bi-l-i-tē\ *n*  
**DI-STENSION** [**'di-sten(t)-shən**] *n* [**L distensionem**] (15c) : the act of distending or the state of being distended or abnormally enlarged  
**DI-STICHON** [**'di-stī-kən**] *n [**L distichon**, fr. **Gk, fr. neut. o distichos**] (1553) : a strophic unit of two lines  
**DI-STICHS** [**'dis-tī-kəs**] *adj* [**LL distichus**, fr. **Gk distichos**] : in two vertical rows '~ leaves'  
**DI-STILL** [**'di-stīl**] *v* **dis-tilled; dis-tilling** : to separate from a liquid by distillation  
fr. **LL distillare**, alter. of **L desillare**, fr. **desillare** drop y (14c) : 1 : to let fall, exude, or pour  
2 : to mist : 3 a : to subject to or transform by distillation : b : to extract the essence  
or as if by distillation : c : to extract the essence  
~ *vi* : 1 a : to fall or materialize in drops or in small quantities at a time : 2 : to perform distillation  
**V-dis-to-lāt, -lat**; **di-'sti-lāt** *n* (ca. 1859) : 1 : steam from vapor during distillation : 2 : something condensed as if by distilling  
**DI-STILLATION** [**'dis-tī-lā-shən**] *n* (14c) : 1 a : the process of successive evaporation and condensation : 2 : also : an instance of distilling : 3 : something distilled  
**DI-STILLER** *n* (1577) : one that distills esp. alcohol  
**DI-STILL-RE, -stīl-rē** [**n, pl er-les** (1759)] : the residue of alcoholic liquors is done  
**DI-STING(k)** *adj* [**ME, fr. MF, fr. L distinctus**] (14c) : 1 : distinguishable to the eye or mind : 2 : clear : 3 : cultural group : 4 : presenting a clear contrast : 5 : handwriting : 3 **archaic** : notable : 6 : a contribution to scholarship : 7 : r appreciated (a ~ possibility) — **dis-tinct-ness** \-'dis-tīkt-nēs\ *n*  
**DI-STINCT** [**'dis-tīkt**] *adj* [**ME, fr. L distinctus**] : SEPARATE, DISCRETE mean not being the same. DISTINCT indicates that something is separated or eye as being apart or different from other things. SEPARATE often stresses lack of connection between two things ('separate rooms'). DISTINCT stresses individuality and lack of connection (between stages). **syn** see in addition EVIDENT  
**DI-STINGUISH** [**'di-'stīŋ(k)-shən**] *n* (13c) : 1 **archaic** : 2 : the distinguishing of a difference (with others) : 3 : something that distinguishes (with others) : 4 : state of being distinguishable : 5 a : to distinguish : b : to make (something) worthy (a politician of some distinction) : c : to recognize (took a law degree with distinction) : d : to distinguish (that sets one apart (the ~ of behavior))  
**DI-STINGUISHEDLY** [**'di-'stīŋ(k)-tīv**] *adv* (15c) : 1 a : serving to give style or distinction : 2 : capable of making a difference in meaning as well as in sound : 3 : elegant  
**DI-STINGUISHMENT** [**'dis-tīŋ-gish-mēt**] *n* : the act of distinguishing  
**DI-STINGUISHABLE** [**'dis-tīŋ-gish-ə-bəl**] *adj* (1714) : 1 : marked by eminence, especially in character : 2 : befitting an eminent person  
**syn** see FACED CONDUCT MEDAL n (1862) : a British medal distinguished conduct in the field  
**Flying Cross** n (1918) : 1 : a British military decoration awarded for heroism while participating in an aerial flight : 2 : acts of gallantry when flying in operation : 3 : S. military decoration awarded for heroic achievement while participating in an aerial flight**



**EN** ENCOURAGE; INSPIRE; HEARTEN; EMBOLDEN mean to encourage or strength of purpose. ENCOURAGE suggests the one's confidence esp. by an external agency (the teacher's encouraged the students to greater efforts); INSPIRE, somewhat implies instilling life, energy, courage, or vigor into something; OTS inspired the people to resist; HEARTEN implies the dispirtedness or despondency by an infusion of fresh courage (a hospital patient heartened by good news). EMBOLDEN giving of courage sufficient to overcome timidity or reluctance boldened by her first success; she tried an even more difficult en-cour-age-ment \ˈɛj-mənt-, rɪ-jən\ n (1568) 1: the act of en-courage-ment \ˈɛj-mənt-, rɪ-jən\ adj (1593) 2: something that encourages en-cour-ag-ing \ˈɛj-lɪŋ-, rɪ-jɪn\ adj (1593) 3: giving hope or pro-SPIRITING — en-cour-ag-ing-ly \ˈɛj-lɪv\ adv en-crime \en-krīm-zən v (1597) 1: to make or dye crimson en-croach \in-krōch-, en-v\ vi [ME encroacher: to get, seize, fr. M chier, fr. OF, fr. en- + croc, croche hook: more at CROC] (1534) 1: to enter by gradual steps or by stealth into the posses-rights of another 2: to advance beyond the usual or proper gradually \~ing sea\ syn see TRESPASS — en-croach-er en-croach-ment \ˈkrōch-mənt\ n en-crust \en-krist-, in-v\ vb [prob. fr. L incrustare; fr. in- + crust- (1641) 1: to cover, line, or overlay with or as if with a crust — form a crust en-crust-a-tion \ˌ(ɛ)n-kras-ˈtā-shən, ˈen-ˌvar of INCRUSTATION en-crypt \in-kript-, en-v\ vt [en- + crypt- (as in cryptogram)] EN-CIPHER 2: ENCODE 1 — en-crypt-ion \ˈkrip-shən\ n en-cum-ber \in-kəm-bər v \cūm-bered; cūm-ber-ing\ -bɪ- en-cumber, fr. MF encombrer, fr. OF; fr. en- (assumed) O dam; weir] (14c) 1: WEIGH DOWN, BURDEN 2: to impede the function or activity of: HINDER 3: to burden with a (as a mortgage) \an estate\ en-cum-brance \in-kəm-brɑns\ n (1535) 1: something thab-ers: IMPEDIMENT 2: a claim (as a mortgage) against prop-en-cum-branc-er \ˌbrɑn(t)-sər\ n (1858) : one that holds a brance en-cy \æŋ(-oʊ-se-)ˈn(t)-\ n suffix [ME -encie, fr. L -entia = ENCE] quality or state (despondency) en-cyc-lo-li-cal \in-sɪ-kli-kəl-, en-adj [LL encyclicus, fr. Gk enkyllos, general, fr. en in + kyklos circle — more at IN; WHEEL] addressed to all the individuals of a group: GENERAL encyclocecal n (1837) : an encyclical letter; specif.: a papal bishops of the church as a whole or to those in one country en-cyc-lo-pe-dia also en-cy-clo-pae-dia \in-sɪ-kli-ˈpe-de-ə\ cyclopaedia course of general education; fr. Gk enkuklios + paid- uation, child rearing, fr. paid-; pais child — more at FEW work that contains information on all branches of knowledge comprehensively a particular branch of knowledge usu. in arranged alphabetically often by subject en-cy-clo-pe-dic also en-cy-clo-pae-dic \ˈpe-di-k\ adj (1824) ing to, or suggestive of an encyclopedia or its methods of arting a subject: COMPREHENSIVE (an ~ mind) (an ~ of art) en-cy-clo-pe-di-cal-ly \ˈdi-kli-ˈle-ē\ adv en-cy-clo-pe-dism \ˈpe-di-zəm\ n (1833) : the quality or sta-en-cyclopedia en-cyc-lo-pedist \ˈpe-dist\ n (1631) 1: one who compiles or encyclopedia 2 often cap: one of the writers of a French encyclopedia (1751–80) who were identified with the Enlightenment edated deism and scientific rationalism en-cyst \in-sist-, en-v\ vt (1845) : to enclose in a cyst ~ vi : to focus en-close \in-kloz- en- cyst — en-cyst-ment \ˈsis(t)-mənt\ end \end\ n [ME ende; fr. OE; akin to OHG ent; end, L ante before] anti against (bef. 12c) 1 a : the part of an area that lies at the b (1) : a point that marks the extent of something (2) : where something ceases to exist (world without ~) e : the or last part lengthwise of TIP d : the terminal unit of something that is marked off by a unit : a player stationed at the extr-line (as in football) 2 a : cessation of a course of action, pur-sult b : DEATH, DESTRUCTION c (1) : the ultimate state SULT, ISSUE 3 : something incomplete, fragmentary, or REMNANT 4 a : an outcome worked toward PURPOSE (the etry is to be poetry — R. P. Warren) b : the object by virtue kept your ~ up b : a particular operation or aspect of an ing or organization (the ~ of the business) 6 : something extreme 7 ULTIMATE — used with the 7 : a period of action of various sports events (as archery or lawn bowling) INTENTION — end-ed \ˈendəd\ adj (archery) EN THE END: AFTER-MATELY — no end EXCEEDINGLY — on end : without a stop (~ it rained for days on end) end v (bef. 12c) 1 a : to bring to an end b DESTROY 2 : to the end of ~ vi 1 a : to come to an end b : to reach a spe-matic rank or situation — usu. used with up (~ed up as a DIE syn see CLOSE end adj (13c) : FINAL, ULTIMATE (~ results) (~ markets) (~uct) end w [prob. alter. of E dial. in (to harvest)] (1607) dial Eng (grain or hay) into a barn or stack — en-do- or endo-comb form [fr. Gk, fr. endon within; akin to OL-indu, Hitt andan within — more at IN] 1 : within, inside el-ton) — compare ECTR. EO 2: taking in (endothemic) en-dam-age \in-da-mij-w\ [ME] (14c) : to cause loss or dam-en-amoe-ba \ˈen-də-mə-bə\ n [NL genus name] (ca. 1879) : genus (Endamoeba) comprising amoebas parasitic in the insects — compare ENTAMOEBA en-dan-ger \in-dān-ŋər vb \dan-gered; dan-ger-ing\ -dān-ŋə- ŋə-w\ (1509) : to bring into danger or peril ~ vi : to create a situa-tion (driving to ~) — en-dan-ger-ment \ˈdān-ŋər-mənt\ en-dan-gered adj (1964) : being or relating to an endangered (~ an bird) (put on the ~ list) endangered species n (1964) : a species threatened with broadly : anyone or anything whose continued existence is en-darch \ˈen-därk\ adj (ca. 1900) : formed or taking place cells outward (< xylem)

(1926): a football play in which the players of scrimmage to take a hand in the opposite flank.  
 2. to my \en-dar-to-tek-to-mě \n  
 artery (fr. *end-* + *arteria* ar-  
 tery) of the inner layer of an artery  
 3. to be occluded (as by intimal plaque)  
 4. brân \n (1927): TELECEPI  
 1891): END PLATE  
 1580) 1 *obs*: to make high  
 cause to become beloved or au  
 -dir-mənt \n (1610) 1: a w  
 2: the act or process of  
 -de-var \ vb *en-deav-ored*; e  
 to exert oneself; fr. *en-* + *dever*  
 to strive to achieve or rea  
 obligation by exertion of  
 to work with set purpose  
 1: serious determined syn  
 ENTERPRISE (fields of ~)  
*Brit var of ENDEAVOR*  
 -mīk, in- \adj [F *endémique*,  
 action of dwelling, fr. *en-*  
 populace ~ more at DEMA  
 to a particular people or co  
 in a particular field, area, or e  
 (the self-indulgence ~ in th  
 to a locality or region (~  
 -en-dem-i-cal-ly \-de-mi-  
 -tē, -də-mī- \n -en-de-mi-  
 1: an endemic organism  
 -dar-gā-nīk \adj [*end-* + *gā-*  
 ENDOTHERMIC 1 (an ~ biol  
 -dek, -sēn, -sīn \n (1947): an  
 -gām \n (1884): the stage of  
 fires; also: the final stages of s  
 n (bef. 12c): something that  
 b: one or more letters or s  
 perfection  
 -dēv \n [ME, fr. MF, fr.  
 (14c) 1: an annual or  
 widely cultivated as a sal  
 the developing crown of chicory w  
 salads by growing in darkness  
 -ēn \n (1888): ENDPAPER  
 -ēn \adj (bef. 12c) 1: being  
 2: extremely numerous  
 -Edmund Burke) 3: j  
 -less-ly adv -end-less-ness n  
 1: a line marking an end or b  
 at either end of a football l  
 goal line b: a line at either en  
 perpendicular to the sidelines  
 -ēn \adj [ME *endelong*, alter. c  
 prep. more at ALONG  
 1: a man at each end of the li  
 engages in comic repartee wit  
 -mōst \adj (bef. 12c): situat  
 -ōt \n (1926): a note placed  
 -dō, -bi-ā-tik, -bē- \adj [IS  
 or tissues of a host (~ fungi)  
 -dō-kār-dē-əl \adj (ca. 184  
 relating to the endocardium  
 -dī-tas \n [NL] (ca. 18:  
 and its valves  
 -dō-om \n, *pl* -dī-ā \-dē-  
 1664): a thin serous membra  
 -kärp \n [F *endocarpe*] (18  
 of the pericarp of a fruit (as  
 when it consists of two or m  
 texture or consistency  
 -kās \n (1949): ENDOCR  
 -dā-kān-drāl \adj: (18  
 formed by, or being ossificat  
 from centers arising in cartil  
 deposition of lime salts in the ca  
 followed by secondary absorpt  
 by true bony tissue  
 -dā-kā-nē-āl \n (19  
 cranial cavity showing the app  
 of the brain  
 -dā-kran, -krin, -krēn \adj [I  
*krain* to separate ~ more  
 1911) 1: secreting interna  
 secretions that are distribu  
 way of the bloodstream (an  
 relating to, affecting, or resen  
 ~ tumors)  
 1: HORMONE 2: ENDO  
 1914): a gland (as the thy  
 ocrine secretion ~ called als  
 -dā-kri-nī-ā-jik, -kri-  
 \adj (ca. 1934): involving or  
 to endocrinology  
 -dā-kri-nā-lā-jē, -kri-  
 the endocrine glands ~ en-

**S E C O N D   E D I T I O N**

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# **Calculus** *of a Single Variable*

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## 3.1

## EXTREMA OF FUNCTIONS

We begin this section by looking informally at the property that a curve and its tangent line exhibit similar behavior near the point of tangency. We then make our observations more precise and turn to the problem of finding extreme values for a function  $f$ .

In Figure 3.1, the line  $l$  is tangent to the graph of the function  $f$  at the point  $P(a, f(a))$ . Note that  $l$  has a positive slope. It *rises* vertically as it moves from left to right. The graph must exhibit this same rising property near  $x = a$ . In terms of the function  $f$ , we see that as  $x$  increases through  $a$ , the values of  $f(x)$  also increase. Since the slope of the tangent line at  $P$  is the derivative  $f'(a)$  of the function  $f$  at  $x = a$ , we conclude: *If  $f'(a) > 0$ , then  $f$  is increasing at  $a$ .*

Examining the situation at the point  $Q = (b, f(b))$  on the graph of  $f$ , we see that the tangent line  $l^*$ , which has a negative slope, *falls* vertically as it moves from left to right. The graph of  $f$  near  $Q$  also drops as it passes through  $x = b$ . We conclude: *If  $f'(b) < 0$ , then  $f$  is decreasing at  $b$ .*

These conclusions are clearly valid only near the point of tangency. The similarity between the behavior of the tangent line  $l$  and the behavior of the function  $f$  holds only when the line and the curve are close to each other, and the tangent line is guaranteed to be close to the curve only near the point of tangency. The line and the curve can drift far apart as we move away from the point of tangency. The tangent line  $l$  at point  $P$  in Figure 3.1 continues to rise forever, but this behavior is not true for the graph of  $f$ . Indeed, we have seen that  $f$  is decreasing at  $Q$ .

At the point  $R(c, f(c))$  on the graph of  $f$ , in Figure 3.1, the tangent line  $l'$  is horizontal: It is neither rising nor falling. The graph in Figure 3.1 shows the behavior of the function near this point: The function  $f$  is decreasing as it approaches  $x = c$  and is increasing afterward. We can say that the function  $f$  has a local minimum value at  $x = c$ —that is, near  $x = c$ , all the values of  $f(x)$  are greater than  $f(c)$ .

Our reasoning here has been geometric and informal. To make our conclusions more precise, let us now consider a graph that represents variations in some physical quantity such as temperature, resistance in an elec-

Figure 3.1

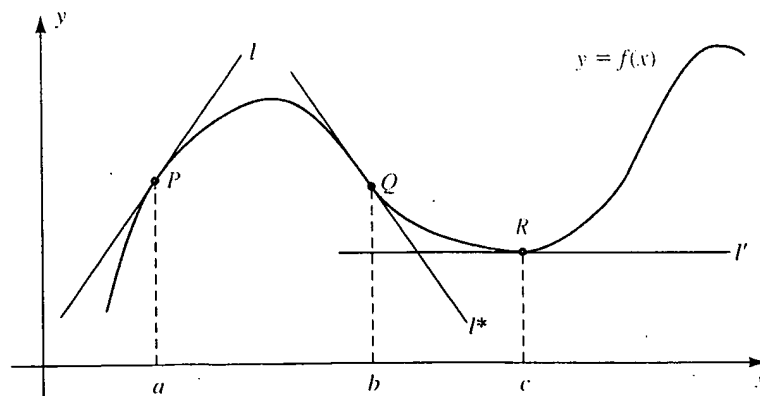
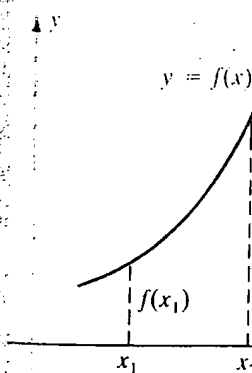


Figure 3.3

Increasing function



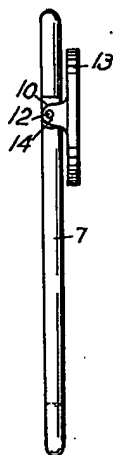
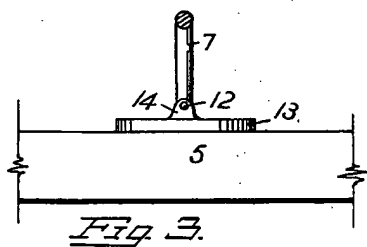
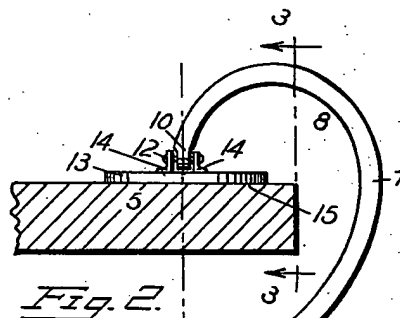
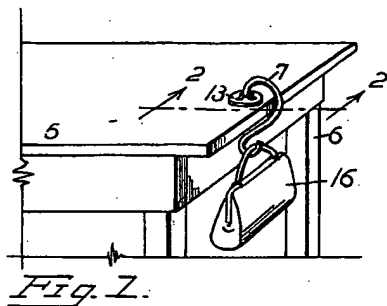
**Dec. 15, 1936.**

A. VON SCHROEDER

**2,064,133**

HANGER FOR HANDBAGS AND THE LIKE

**Filed March 12, 1935**



INVENTOR.  
ALBRECHT VON SCHROEDER

BY

BY G. J. D. [Signature]  
ATTORNEY.

## UNITED STATES PATENT OFFICE

2,064,133

## HANGER FOR HANDBAGS AND THE LIKE

Albrecht von Schroeder, Denver, Colo.

Application March 12, 1935, Serial No. 10,672

2 Claims. (Cl. 248-214)

This invention relates to improvements in folding supports for handbags and the like.

Ladies ordinarily carry handbags of different sizes and when they go to a restaurant for meals, or sit down at a card table, the handbag must either be laid upon the table, or held in the lap, both ways of which are inconvenient. Since women usually carry money and other valuables in their handbags, it is necessary to keep them in view at all times, to prevent unauthorized persons from obtaining access to them.

It is the object of this invention to produce a hook or support of such construction that it can be readily carried in the handbag and which shall be so designed that it can be used for supporting the handbag from the edge of a table and which makes it possible for a woman to keep her handbag within sight and easy reach when seated at a table.

The improved support or hook that forms the subject of this invention will now be described in detail and for this purpose reference will be had to the accompanying drawing on which it has been illustrated in its preferred form and in which

Figure 1 is a fragmentary perspective view of a card table showing a handbag supported from the edge thereof by the improved hook;

Figure 2 is a section through the edge of the table, taken on line 2-2, Figure 1, and shows the hook in place thereon, the handbag being indicated by dotted lines;

Figure 3 is a section taken on line 3-3, Figure 2, but shows only a portion of the hook; and

Figure 4 is an edge elevation of the hook showing the same in folded position and ready to be inserted into the handbag.

In the drawing, reference numeral 5 designates the top of a table, which in Figure 1 has been shown as an ordinary card table provided with foldable legs 6. The hook 7 is formed from a wire or rod of any suitable material such as steel or brass, and whose surface may have any desirable finish such as nickel, silver or gold plating. The hook is so bent that it resembles, in a general way, the letter S, the upper loop 8 being quite large in comparison with the lower loop 9, all as shown in Figure 2. The end 10 of loop 8 is directed downwardly and has its center in a plane x-x which passes through the center 11 of the loop 9. End 10 is flattened and its sides lie in spaced planes perpendicular to the plane of the hook. End 10 is provided with an opening for the reception of the pivot pin 12. A plate 13, which may be either circular or oblong, is provided on its upper surface with two lugs or ears 14 that are spaced to receive the end 10, and provided with openings for the reception of the pivot pin 12.

Plate 13 can be turned about pivot 12 from the position shown in Figures 2 and 3 to the position shown in Figure 4; in the latter position the hook

can be said to be folded and can be easily put into the handbag or a pocket.

When the hook is to be employed for supporting a handbag or any other object, the plate 13 is turned from the position shown in Figure 4 to that shown in Figures 2 and 3, and the hook is put into position over the edge of the table in the manner shown in Figures 1 and 2. The flat surface of the plate engages the table top and prevents it from becoming scratched or marred. The under surface of the plate may have a covering of rubber or felt if desired.

After the hook has been put into position, the handbag, designated by numeral 16, may be hung by its handle 17 from the loop 9. It will be seen from the drawing that the hook can swing about the axis of the pivot 12, but not in the opposite direction. The handbag can be supported in either closed or open position, and when it is open, the owner has ready access to it at all times, which is a great convenience.

After the hook has been used, it is removed and the plate 13 turned into the position shown in Figure 4, in which position it takes up very little space.

Although the hook is primarily intended to support handbags, it is evident that it can be employed for supporting any other articles such as clothing.

In the claims the words "upper" and "top" are employed to designate the end of the hook having the enlarged loop and the "bottom" or "lower" the end having the small loop 9.

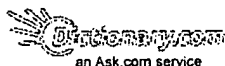
Having described the invention, what is claimed as new is:

1. A support comprising in combination, a hook-portion of substantially S-shape, the upper loop being larger than the lower and adapted to extend over the edge of a table top, the lower loop serving as a hook to support an object, the end of the upper loop terminating in a portion whose axis extended intersects the lower loop, and a plate attached to the end of the upper loop by a pivot that is perpendicular to the axis and lies in the plane of the hook-portion, said plate serving to contact with a supporting surface.

2. A support comprising in combination a hook-portion of substantially S-shape, the end of the upper loop being directed downwardly so that its center line intersects the lower loop, the end of the upper loop having a plate attached thereto by a pivot pin that lies in the plane of the hook-portion and is perpendicular to the center line of the end of the loop, the plate being rotatable about the pivot from a plane perpendicular to the center line and into a plane parallel with the plane of the hook-portion.

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swiv·el ⓘ [swiv-uhl] Pronunciation Key - Show IPA

Pronunciation *noun, verb, -eled, -el-ing or (especially British) -elled, -el-ling.*

## -noun

1. a fastening device that allows the thing fastened to turn around freely upon it, esp. to turn in a full circle.
2. such a device consisting of two parts, each of which turns around independently, as a compound link of a chain, one part of which turns freely in the other by means of a headed pin or the like.
3. a pivoted support allowing a gun to turn around in a horizontal plane.
4. a swivel gun.
5. a device attached to a loom and used as a shuttle to weave extra threads in the production of small figures, esp. dots.

## -verb (used with object)

6. to turn or pivot on or as if on a swivel: *He swiveled his chair around.*
7. to fasten by a swivel; furnish with a swivel.

## -verb (used without object)

8. to turn on or if as on a swivel.

[Origin: 1275-1325; ME (n.), equiv. to swiv- (weak s. of OE swīfan to revolve; c. ON svīfa to turn) + -el instrumental suffix]

## -Related forms

swiv·el·like, *adjective*

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swiv·el ⓘ (swiv'al) Pronunciation Key

n.

1. A link, pivot, or other fastening so designed that it permits the free turning of attached parts.
2. A pivoted support that allows an attached object, such as a chair or gun, to turn in a horizontal plane.



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turn or gun, to turn in a horizontal plane.

3. A gun that turns on a pivot.

v. **swiv-eled** or **swiv-elled**, **swiv-el-ing** or **swiv-el-ling**,  
**swiv-els**

v. *tr.*

1. To turn or rotate on or as if on a swivel.
2. To secure, fit, or support with a swivel.

v. *intr.*



To turn on or as if on a swivel.

[Middle English swyvel.]

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**swivel** (n.)

1307, from frequentative form of stem of O.E. verb swifan "to move in a course, sweep" (a class I strong verb), from P.Gmc. \*swipanan (cf. O.Fris. swiva "to be uncertain," O.N. svifa "to rove, ramble, drift"), from PIE base \*swei- "swing, bend, move in a sweeping manner." M.E. swive was the principal slang for "to have sexual intercourse with," a sense that developed c.1300. This probably explains why, though the root is verbal, the verb swivel is not attested in Mod.Eng. until 1794.

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**swivel**

*noun*

1. a coupling (as in a chain) that has one end that turns on a headed pin

*verb*

1. turn on a pivot [syn: pivot]

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**Swivel**

Swiv"el, n. [AS. sw[=i]fan to move quickly, to remove; akin to Icel. sveifla to whirl, shake, sv[=i]fa to ramble, to turn. See Swoop, and cf. Swift a reel, Swift, a.]

1. (Mech.) A piece, as a ring or hook, attached to another piece by a pin, in such a manner as to permit rotation about the pin as an axis.

2. (Mil.) A small piece of ordnance, turning on a point or swivel; -- called also swivel gun. --Wilhelm.

**Swivel bridge**, a kind of drawbridge that turns round on a vertical axis; a swing bridge.

**Swivel hook**, a hook connected with the iron strap of a pulley block by a swivel joint, for readily taking the turns out of a tackle.

**Swivel joint**, a joint, the two pieces composing which turn round, with respect to each other, on a longitudinal pin or axis, as in a chain, to prevent twisting.

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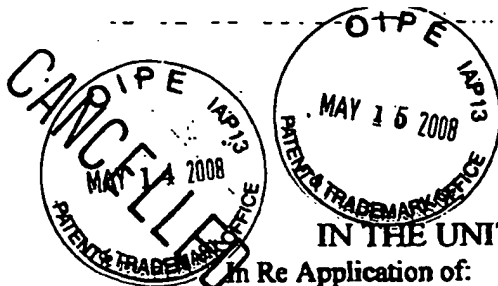
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Shelly Lenna Bauerly

Application Serial No. 10/763,426

Filed: January 23, 2004

For: Purse Hanger

) Examiner: Le, Tan

) Group Art Unit: 3632

) Declaration

) Ronald R. Shea

) 2540 Country Hills Rd.

) Apt. 192

) Brea, CA 92821

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**DECLARATION OF LENNA BAUERLY**  
**UNDER 37 § CFR 1.116(e) and 1.68**

I, Shelly Lenna Bauerly, am the named inventor and owner of U.S. Patent Application No. 10/763,426 by Bauerly, entitled "Purse Hanger," filed on January 23, 2004.

The development of a working model of the claimed invention consisted of numerous experiments, including many designs that failed to achieve the design initiatives.

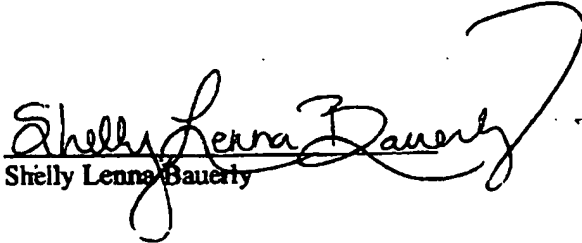
The design of the rigid arm and chain combination, as described in the patent application, that would remain stable when supporting a purse from a table top, was only achieved after that experimentation and failure by actual models.

Additional experimentation with various designs was undertaken to develop a means of reducing the likelihood that a purse and hanger would be knocked off a table by a slight bump or brush of a passer-by. Various rubber and cork surfaces were not sufficient to prevent the purse hanger from sliding off of a table when brushed by a passer by. Attempts to suspend a purse sufficiently far under a table to minimize brushing resulted in impractical designs. Eventually, the swivel joint described in the invention was conceived to allow the purse to rotate freely when bumped, thereby releasing rotational energy without the purse hanger pivoting off a table top due to that rotational energy. When experiments were conducted with this design, it greatly enhanced the stability of the purse hanger when a purse hanging therefrom was bumped or brushed by a passer-by.

I certify under penalty of perjury that I have actual knowledge of all claims and assertions set forth in the foregoing statement, and that foregoing statement is true and accurate. I am aware that willful false statements and the like are punishable by fine or

imprisonment or both under 18 U.S.C. § 1001 and may jeopardize the validity of the application, or any patent issuing thereon.

Signed by my hand this 10<sup>th</sup> day of May, 2008

  
Shelly Lenna Bauerly